

INVITATION TO BID

STATE OF LOUISIANA

DIVISION OF ADMINISTRATION
OFFICE OF STATE PURCHASING

BIDS WILL BE PUBLICLY OPENED:

DEC 01, 2005 10:00 AM

PURCHASING AGENCY NO. : 107001

=====> VENDOR NO. :
SOLICITATION : 2202817
FILE NO. : M26126DL
OPENING DATE : 12/01/05

=====> VENDOR NAME AND ADDRESS

FILL IN VENDOR NUMBER (FEIN), NAME AND ADDRESS ABOVE, BEFORE SUBMITTING BID.

SEE NO. 8 BELOW. RETURN BID TO

2202817 12/01/05 10:00 AM
M26126DL

OFFICE OF STATE PURCHASING
OFFICE OF STATE PURCHASING
POST OFFICE BOX 94095
BATON ROUGE, LA 70804-9095

BUYER : DOROTHEA YOUNG, CPPB
BUYER PHONE : (225) 342-8022
DATE ISSUED : 10/12/05
REQ. AGENCY : 264000 FOLD HERE-->
DCRT-OFFICE OF STATE PARKS
AGENCY REQ. NO. : 72906026
ISIS REQ. NO. : 1281179
VENDOR PHONE :
FISCAL YEAR : 06
CLASS/SUBCLASS : 96820
SCHEDULED BEGIN DATE : 00/00/00
SCHEDULED END DATE : 00/00/00
T-NUMBER :

OBSERVATION TOWER REPLACEMENT
TIM PAMPELL/POVERTY POINT SHS

TO BE COMPLETED BY VENDOR

1. _____ PLEASE REMOVE FROM THIS COMMODITY CODE.
2. _____ DELIVERY WILL BE MADE IN THIS NUMBER OF DAYS AFTER RECEIPT OF ORDER.
3. _____ % CASH DISCOUNT FOR PROMPT PAYMENT IF MADE WITHIN THIRTY (30) DAYS. CASH DISCOUNTS FOR LESS THAN 30 DAYS OR LESS THAN 1% WILL BE ACCEPTED, BUT WILL NOT BE CONSIDERED IN DETERMINING AWARDS. ON INDEFINITE QUANTITY TERM CONTRACTS, CASH DISCOUNTS WILL BE ACCEPTED AND TAKEN BUT WILL NOT BE CONSIDERED IN DETERMINING AWARDS.
4. _____ BID BOND ATTACHED, _____ CERTIFIED CHECK ATTACHED, _____ OTHER, IF REQUIRED.
5. _____ BID REFERENCE NUMBER. (THIS NUMBER WILL APPEAR ON RESULTING ORDER OR CONTRACT).

INSTRUCTIONS TO BIDDERS

1. READ THE ENTIRE BID, INCLUDING ALL TERMS AND CONDITIONS AND SPECIFICATIONS.
2. ALL BID PRICES MUST BE TYPED OR WRITTEN IN INK. ANY CORRECTIONS, ERASURES OR OTHER FORMS OF ALTERATION TO UNIT PRICES SHOULD BE INITIALED BY THE BIDDER.
3. THIS BID IS TO BE MANUALLY SIGNED IN INK. FOLD HERE-->
4. BID PRICES SHALL INCLUDE DELIVERY OF ALL ITEMS F.O.B. DESTINATION OR AS OTHERWISE PROVIDED. BIDS CONTAINING "PAYMENT IN ADVANCE" OR "C.O.D." REQUIREMENTS MAY BE REJECTED. PAYMENT IS TO BE MADE WITHIN 30 DAYS AFTER RECEIPT OF PROPERLY EXECUTED INVOICE OR DELIVERY, WHICHEVER IS LATER.
5. AMOUNT OF BID BOND REQUIRED: _____ 5 %
6. AMOUNT OF PERFORMANCE BOND, IF REQUIRED. _____ OR _____ 100% OF BID.
7. DESIRED DELIVERY: _____ 120DAYS ARO
8. TO ASSURE CONSIDERATION OF YOUR BID, ALL BIDS AND ADDENDA SHOULD BE RETURNED IN AN ENVELOPE OR PACKAGE CLEARLY MARKED WITH THE BID OPENING DATE AND THE BID NUMBER, OR SUBMITTED IN THE SPECIAL ENVELOPE IF FURNISHED FOR THAT PURPOSE.
9. BIDS SUBMITTED ARE SUBJECT TO PROVISIONS OF THE LAWS OF THE STATE OF LOUISIANA INCLUDING BUT NOT LIMITED TO L.R.S. 39:1551-1736; PURCHASING RULES AND REGULATIONS; EXECUTIVE ORDERS; STANDARD TERMS AND CONDITIONS; SPECIAL CONDITIONS; AND SPECIFICATIONS LISTED IN THIS SOLICITATION.
10. IMPORTANT: BY SIGNING THE BID, THE BIDDER CERTIFIES COMPLIANCE WITH ALL INSTRUCTIONS TO BIDDERS, TERMS, CONDITIONS AND SPECIFICATIONS, AND FURTHER CERTIFIES THAT THIS BID IS MADE WITHOUT COLLUSION OR FRAUD. THIS BID IS TO BE MANUALLY SIGNED IN INK BY A PERSON AUTHORIZED TO BIND THE VENDOR (SEE NO.30). ALL BID INFORMATION SHALL BE MADE WITH INK OR TYPEWRITTEN.

VENDOR PHONE NUMBER:
FAX NUMBER:

TITLE

DATE

SIGNATURE OF AUTHORIZED BIDDER - SEE NO. 30, PAGE 3.
(MUST BE SIGNED)

NAME OF BIDDER
(TYPED OR PRINTED)

PROPOSAL NUMBER M 26126 DL

SOLICITATION NUMBER: 2202817

**OBSERVATION TOWER REPLACEMENT
FOR
POVERTY POINT STATE HISTORIC SITE
EPPS, LOUISIANA
CATEGORY**

BID DELIVERY INSTRUCTIONS FOR STATE PURCHASING:

BIDDERS ARE HEREBY ADVISED THAT THE U.S. POSTAL SERVICE DOES NOT MAKE DELIVERIES TO OUR PHYSICAL LOCATION.

BIDS MAY BE MAILED THROUGH THE U.S. POSTAL SERVICE TO OUR BOX AT:

OFFICE OF STATE PURCHASING
P O BOX 94095
BATON ROUGE LA 70804-9095

BIDS MAY BE DELIVERED BY HAND OR COURIER SERVICE TO OUR PHYSICAL LOCATION AS FOLLOWS:

OFFICE OF STATE PURCHASING
CLAIBORNE BUILDING, SUITE 2-160
1201 NORTH THIRD STREET
BATON ROUGE, LA 70802

BIDDER IS SOLELY RESPONSIBLE FOR ENSURING THAT ITS COURIER SERVICE PROVIDER MAKES INSIDE DELIVERIES TO OUR PHYSICAL LOCATION. THE OFFICE OF STATE PURCHASING IS NOT RESPONSIBILITY FOR ANY DELAYS CAUSED BY THE BIDDER'S CHOSEN MEANS OF BID DELIVERY.

BIDDER IS SOLELY RESPONSIBLE FOR THE TIMELY DELIVERY OF ITS BID. FAILURE TO MEET THE BID OPENING DATE & TIME SHALL RESULT IN REJECTION OF THE BID.

PUBLICIZING AWARDS. IN ACCORDANCE WITH L.A.C.34:i.535, UNSUCCESSFUL BIDDERS WILL BE NOTIFIED OF THE AWARD PROVIDED THAT THEY SUBMIT WITH THEIR BID A SELF-ADDRESSED STAMPED ENVELOPE REQUESTING THIS INFORMATION.

FOR ADDITIONAL INFORMATION, CONTACT: **TIM PAMPELL**
(225) 342-8101

SITE VISIT IS REQUIRED.

A pre-bid conference will be conducted on this project at the jobsite on Thursday, November 17, 2005 at 10:30 A.M. Vendors are urged to attend.

Signature Authority.

In accordance with L.R.S. 39:1594 (Act 121), the person signing the bid must be:

1. A current corporate officer, partnership member or other individual specifically authorized to submit a bid as reflected in the appropriate records on file with the Secretary of State; or
2. An individual authorized to bind the vendor as reflected by an accompanying corporate resolution, certificate or affidavit; or
3. An individual listed on the State of Louisiana Bidder's application as authorized to execute bids. By signing the bid, the bidder certifies compliance with the above.

NOTICE TO BIDDERS

Sealed bids will be received for the State of Louisiana by the Division of Administration, Office of State Purchasing, 1201 N. 3rd St., 2nd Floor, Suite 2-160, P O. Box 94095, Baton Rouge, Louisiana 70804-9095 until 10:00 A.M., on December 1, 2005, for the following:

**OBSERVATION TOWER REPLACEMENT
FOR
POVERTY POINT STATE HISTORIC SITE
EPPS, LOUISIANA**

Proposal Number: **M 26126 DL**
Solicitation Number: **2202817**

Complete Bidding Documents may be obtained from:

OFFICE OF STATE PURCHASING
CLAIBORNE BUILDING, 2ND FLOOR
1201 NORTH THIRD STREET
BATON ROUGE, LA 70804
Attn: Pamela Allen
Email: pamela.allen@la.gov
Fax: (225) 342-8688
Phone: (225) 342-8019

SITE VISIT IS REQUIRED.

A pre-bid conference will be conducted on this project at the jobsite on Thursday, November 17, 2005 at 10:30 A.M. Vendors are urged to attend.

All bids must be accompanied by bid security equal to five percent (5%) of the sum of the base bid and all alternates, and must be in the form of a certified check, cashier's check or Bid Bond. Surety represents that it is listed on the current U. S. Department of Treasury Financial Management Service list of approved bonding companies and that it is listed thereon as approved for an amount equal to or greater than the amount for which it obligates itself in this instrument. No Bid Bond indicating an obligation of less than five percent (5%) by any method is acceptable.

The successful Bidder shall be required to furnish a Performance and Payment Bond written by a company licensed to do business in Louisiana, in an amount equal to 100% of the Contract amount, and who is currently on the U.S. Department of the Treasury Financial Management Service List. The bond shall not be accepted if written for an amount exceeding the amount listed in the Treasury Financial Management Service List.

Bids shall be accepted only from Contractors who are licensed under La. R.S. 37:2150-2163 for the classification(s) such as, **Building Construction and/or specialty of Tower Construction**. No bid may be withdrawn for a period of thirty (30) days after receipt of bids.

When this project is financed either partially or entirely with State Bonds, the award of this Contract is contingent upon the sale of bonds by the State Bond Commission. The State shall incur no obligation to the Contractor until the Contract Between Owner and Contractor is fully executed.

STATE OF LOUISIANA
DIVISION OF ADMINISTRATION
OFFICE OF STATE PURCHASING
DENISE LEA
DIRECTOR OF STATE PURCHASING

PROPOSAL NUMBER M 26126 DL
DOROTHEA YOUNG (225) 342-8022

GENERAL CONTRACT PROPOSAL FORM

BID OPENING DATE: 10:00 A.M., **DECEMBER 1, 2005**

STATE OF LOUISIANA
DIVISION OF ADMINISTRATION
PURCHASING SECTION
POST OFFICE BOX 94095, CAPITOL STATION
BATON ROUGE, LOUISIANA 70804-9095

BID MADE BY: _____

PROJECT: Furnish all labor, materials, tools and equipment necessary for
Observation Tower Replacement at Poverty Point State Historic Site,
Epps, Louisiana as per plans, drawings and specifications prepared by
the agency.

The undersigned, in compliance with your invitation for bids for the project listed above, having examined the specifications and related documents, inspected site and being familiar with all of the conditions surrounding the fulfillment of the contract, hereby proposes to furnish all labor, materials, tools and equipment necessary to complete the above referenced project within the time set forth herein and for the price stated below.

The Lump Sum Total Price stated shall include all permits and governmental fees, licenses, and inspections, and all sales, consumer use and taxes of any other nature or kind whatever arising from or pertaining to the work or portions thereof provided by the contractor which are legally enacted at the time bids are received, whether or not yet effective.

BASE BID: I/We propose to furnish all materials and perform all work as described in the specifications and related documents for the sum of: (WORDS AND FIGURES)

LUMP SUM TOTAL \$ _____

COMPLETION DATE: The undersigned guarantees completion of project as per base bid in _____ calendar days.

NOTE: WHERE SO INDICATED BY THE MAKEUP OF THE BID FORM, SUMS SHALL BE EXPRESSED IN BOTH WORDS AND FIGURES, AND IN CASE OF A DISCREPANCY BETWEEN THE TWO, THE WRITTEN AMOUNT SHALL GOVERN.

IMPORTANT: IN ACCORDANCE WITH R.S. 37:2163A CONTRACTORS' LICENSE NUMBER IN THE APPROPRIATE CLASSIFICATION(S) SUCH AS, **BUILDING CONSTRUCTION**, AND/OR SPECIALTY OF **TOWER CONSTRUCTION** MUST APPEAR ON THE BID OPENING ENVELOPE ON ALL PROJECTS IN THE AMOUNT OF \$50,000.00 OR MORE (AND \$1.00 OR MORE IF HAZARDOUS MATERIALS ARE INVOLVED).

FOR ANY BID SUBMITTED IN THE AMOUNT OF FIFTY THOUSAND DOLLARS OR MORE, THE CONTRACTOR SHALL CERTIFY THAT HE IS LICENSED AND SHOW HIS LICENSE NUMBER ON THE BID.

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA:

Addendum No: _____ Dated: _____ Addendum No: _____ Dated: _____

Addendum No: _____ Dated: _____ Addendum No: _____ Dated: _____

LOUISIANA CONTRACTORS LICENSE NO. _____

NAME (PLEASE PRINT OR TYPE) _____

SIGNATURE _____

TITLE _____

FIRM NAME _____

ADDRESS _____

PHONE _____ (____) _____

FAX _____ (____) _____

GENERAL CONDITIONS, INSTRUCTIONS, POLICIES AND PROCEDURES

BIDDING PROCEDURE:

All bids must be submitted on the forms provided for this purpose and must be filled out with ink or typewritten and signed in ink. Any interlineation, alteration or erasure must be initialed by the signer of the bid.

Bidder shall assume full responsibility for timely delivery to the location designated for receipt of bids. Any bids received after the designated opening time will be returned unopened.

The Division of Administration of the State of Louisiana is an equal opportunity employer and looks to its Contractors, Subcontractors, vendors and suppliers to take affirmative action to effect this commitment in its operations.

Compliance with civil rights laws. By submitting and signing this solicitation, the bidder agrees to abide by the requirements of the following as applicable: Title VI and Title VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972, Federal Executive Order 11246, the Federal Rehabilitation Act of 1973, as amended, the Vietnam Era Veteran's Readjustment Assistance Act of 1974, Title IX of the Education Amendments of 1972, the Age Act of 1975, and bidder agrees to abide by the requirements of the Americans With Disabilities Act of 1990. Bidder agrees not to discriminate in its employment practices, and will render services under any contract entered into as a result of this solicitation, without regard to race, color, religion, sex, national origin, veteran status, political affiliation, or disabilities. Any act of discrimination committed by bidder, or failure to comply with these statutory obligations when applicable, shall be grounds for termination of any contract entered into as a result of this solicitation.

BIDDERS REPRESENTATION:

In making his bid, each bidder represents that: He has read and understands the bid documents and his bid is made in accordance herewith; he has visited the site and has familiarized himself with the local conditions under which the work is to be performed; and his bid is based upon the specifications described in the bid documents without exception.

ADDENDA:

No Addenda will be issued within a period of seventy-two (72) hours prior to the date set for receipt of bids, except an Addendum, if necessary, postponing the date of receipt of bids or cancelling the request for bids.

Receipt of all Addenda issued shall be acknowledged in bid proposal and/or returned with bid proposal.

COMPLIANCE REGARDING SUSPENSION/DEBARMENT:

CERTIFICATION OF NO SUSPENSION OR DEBARMENT. BY SIGNING AND SUBMITTING ANY BID FOR \$100,000 OR MORE, THE BIDDER CERTIFIES THAT THEIR COMPANY, ANY SUBCONTRACTORS, OR PRINCIPALS ARE NOT SUSPENDED OR DEBARRED BY THE GENERAL SERVICES ADMINISTRATION (GSA) IN ACCORDANCE WITH THE REQUIREMENTS IN OMB CIRCULAR A-133.

A LIST OF PARTIES WHO HAVE BEEN SUSPENDED OR DEBARRED CAN BE VIEWED VIA THE INTERNET AT WWW.ARNET.GOV/EPLS.

CONSIDERATION OF BIDS:

The Division of Administration reserves the right to reject any or all bids and in particular to reject a bid not accompanied by any required bid security or data required by the bid documents or a bid in anyway incomplete or irregular.

The Division of Administration reserves the right to waive any informality or irregularity in any bid received, deemed to be in the best interest of the State of Louisiana.

RECORDATION CERTIFICATE:

Contractor upon receipt of executed contract, bond, purchase order and Notice to Proceed shall record contract and bond with the Clerk of Court in the parish in which the work is to be performed, obtain a Certificate of Recordation from the Clerk of Court and forward this Certificate immediately to the Division of Administration. The contracting agency will process no invoices until receipt of the Certificate of Recordation.

Liquidated Damages in the amount of \$50.00 per day will be assessed for each and every day the project remains incomplete beyond the established completion date.

CONTRACT, PERFORMANCE BOND, LABOR AND MATERIALS PAYMENT BOND:

If the undersigned is notified of the acceptance of the above bid or bids, within thirty (30) days of the time set forth for the opening of bids, he agrees to execute a contract for the work accepted, in the standard contract form currently used by the Division of Administration within ten (10) days after notice from the Division of Administration.

The undersigned further agrees, if awarded the contract, to execute and deliver to the Division of Administration at the time the contract documents are executed, a Performance Bond with Power of Attorney, on the forms provided, in an amount equal to the contract sum and agrees that this bond will be secured by a surety or insurance company currently on the United States Department of the Treasury Financial Management Service List of approved bonding companies and in accordance with restrictions set by them or by an insurance company that is either domiciled in Louisiana or owned by Louisiana residents and is licensed to write surety bonds. In addition, any surety bond written for a public works project shall be written by a surety or insurance company that is currently licensed to do business in the state of Louisiana. Also, to be provided at the same time is a Labor and Materials Payment Bond in an amount equal to 100% of the contract amount.

BID SECURITY:

Bid security MUST be attached (Insurance Company, Bank Money Order, Certified Check or Cashier's Check) in the sum of five percent (5%) of the amount bid (including base bid and additive alternates, if any) and shall become the property of the Owner in the event the contract and bond are not executed within the time set forth above. If bid bond is used, it shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A-rating in the latest printing of the A.M. Best's Key Rating Guide to write individual bonds up to ten percent (10%) of policyholders' surplus as shown in the A.M. Best's Key Rating Guide.

AFFIDAVIT:

Successful Contractor shall be required to execute an affidavit attesting "THAT PUBLIC CONTRACT WAS NOT SECURED THROUGH EMPLOYMENT OR PAYMENT OF SOLICITOR".

REJECTION OF BIDS:

The undersigned understands that the Division of Administration reserves the right to reject any and all bids and to waive any informalities.

WITHDRAWAL OF BIDS:

The undersigned agrees that this bid shall be good and may not be withdrawn for a period of thirty (30) calendar days after the bid opening.

PROGRESS PAYMENTS: The following payment schedule shall apply:

For contracts with a completion date of more than thirty (30) days:

On or about the first day of each month, ninety percent (90%) of the value based on the Contract Price of labor and materials incorporated in the work and of materials suitably stored at the site thereof up to the first day of that month, as estimated by the owner, less the aggregate of previous payments and upon substantial completion of the entire work, a sum sufficient to increase the total payment to ninety percent (90%) of the Contract Price.

For contracts with a completion date of thirty (30) days or less:

Upon satisfactory completion of the work, ninety percent (90%) of the Contract Price.

ACCEPTANCE:

Upon written notice by the Owner to the Division of Administration, a Notice by Owner of Acceptance of Work will be executed and forwarded to the Contractor for recording with the Clerk of Court in the parish in which the work has been performed and shall furnish a clear Lien Certificate from the Clerk of Court (to the owner along with final invoice) forty-five (45) days after recordation of acceptance. Final payment of ten percent (10%) will be made at this time.

INSURANCE:

Compensation Insurance, public liability and property damage insurance, as per the attached insurance page, are required on this bid.

Unless otherwise provided, the Owner shall purchase and maintain property insurance upon the entire work at the site to the full insurable value equal to the contract sum plus all amendments.

The State of Louisiana is to provide Builder's Risk Insurance to protect the Owner, Contractor, and Sub-Contractors as their interests may appear. The policy is subject to the following deductibles, which will be paid by the Contractor:

All covered causes of loss, except flood \$1,000 deductible per occurrence
Flood cause of loss \$5,000 deductible per occurrence

The policy insures against "all risk" of direct physical loss or damage subject to certain exclusions and limitations. A copy of the current policy can be found at the Office of Risk Management website at <http://www.doa.louisiana.gov/orm/uw.htm>. It is the Contractor's responsibility to review this policy and, if additional insurance is determined to be needed, to purchase the additional insurance to protect the Contractor and Sub-Contractor interest in the project.

Inquiries concerning the Owner's insurance policy shall be sent to the address shown below. In the event of a loss or claim, please notify the Office of Risk Management at the telephone number shown below, with confirmation in writing, providing all pertinent information, such as date of loss, type of loss, approximate extent of damage, location, and project number.

Division of Administration
Office of Risk Management
Post Office Box 91106
Baton Rouge, LA 70821-9106
(225) 342-8500

INSURANCE REQUIREMENTS

CONTRACTOR'S LIABILITY INSURANCE

Proof of Insurance will be required before work can commence.

Insurance coverage specified below shall be furnished with the following minimum limits:

COMPENSATION INSURANCE: The Contractor and Subcontractors shall take and maintain during the life of the contract Workman's Compensation Insurance for all of their employees employed at the site of the project. In case any class of employees engaged in hazardous work under the Workman's Compensation Statute, the Contractor and Subcontractor shall provide Employer's Liability Insurance for the protection of their employees not otherwise protected.

PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE: Comprehensive Public General Liability Insurance, including but not limited to bodily injury, property damage, contractual liability, products liability, completed operations and owner's protective liability with combined single limits of \$1,000,000 per occurrence with a minimum aggregate of \$2,000,000.

LICENSED AND NON-LICENSED MOTOR VEHICLES: The Contractor shall take out and maintain during the life of the contract, Automobile Public Liability Insurance in an amount not less than combined single limits of \$500,000 per occurrence for bodily injury/property damage. If any non-licensed motor vehicles are engaged in operations within the terms of the contract on the site of the work to perform thereunder, such insurance shall cover the use of all such motor vehicles engaged in operating within the terms of the contract on the site of the work to be performed thereunder, unless such coverage is included in the insurance specified.

JOBSITE VERIFICATION FORM

VENDOR MUST INSPECT JOB SITE TO VERIFY MEASUREMENTS AND/OR AMOUNT OF SUPPLIES NEEDED PRIOR TO BIDDING. IF VENDOR FINDS CONDITIONS THAT DISAGREE WITH THE PHYSICAL LAY-OUT AS DESCRIBED IN THIS BID, OR OTHER FEATURES OF THE SPECIFICATIONS THAT APPEAR TO BE IN ERROR, SAME SHALL BE BROUGHT TO THE ATTENTION OF THE OFFICE OF STATE PURCHASING PERSONNEL PRIOR TO BID OPENING. **SITE VISIT MUST BE VERIFIED BY AGENCY.**

CONTACT PERSON FOR SITE VISIT IS TIM PAMPELL AT (225) 342-8101.

THIS SIGNED STATEMENT CERTIFIES THAT THE VENDOR NAMED BELOW HAS VISITED THE JOB SITE AND IS FAMILIAR WITH ALL CONDITIONS SURROUNDING FULFILLMENT OF THE SPECIFICATIONS FOR THIS PROJECT.

VENDOR'S COMPANY NAME

STATE AGENCY'S NAME

VENDOR'S SIGNATURE

AGENCY'S SIGNATURE

**SPECIFICATIONS FOR
OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE**

**POVERTY POINT STATE HISTORIC SITE
EPPS, LOUISIANA
PROJECT NO.: 06-264-03-01-1B**

KATHLEEN BABINEAUX BLANCO
GOVERNOR

ANGELE DAVIS
SECRETARY — DEPARTMENT OF CULTURE, RECREATION, & TOURISM

STUART JOHNSON
ASSISTANT SECRETARY — OFFICE OF STATE PARKS

ARCHITECTS +

*618-A Main Street
Baton Rouge, LA 70801
(P) 225 334-9923
(F) 225 334-9823*

JUNE 13TH, 2005

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

TABLE OF CONTENTS

DIVISION	SECTION TITLE	PAGES
	DIVISION 1 - GENERAL REQUIREMENTS	
01100	Summary	3
01300	Administrative Requirements	2
01500	Temporary Facilities And Controls	2
01701	Execution And Closeout Requirements	3
01732	Selective Demolition	2
	DIVISION 2 - SITE CONSTRUCTION	
02230	Site Clearing	2
	DIVISION 3 - CONCRETE	
03300	Cast In Place Concrete	3
	DIVISION 4 - MASONRY NOT APPLICABLE	
	DIVISION 5 - METALS	
05120	Structural Steel	2
05210	Steel Joists	2
05400	Cold Formed Metal Framing	2
05520	Railing	2
	DIVISION 6 - WOOD AND PLASTICS	
06200	Finish Carpentry	2
	DIVISION 7 - THERMAL AND MOISTURE PROTECTION	
07411	Metal Roof Panels	2
07620	Sheet Metal Flashing and Trim	2
	DIVISION 8 - DOORS AND WINDOWS NOT APPLICABLE	
	DIVISION 9 - FINISHES NOT APPLICABLE	
	DIVISION 10 - SPECIALTIES NOT APPLICABLE	
	DIVISION 11 - EQUIPMENT	

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

NOT APPLICABLE

DIVISION 12 - FURNISHINGS

NOT APPLICABLE

DIVISION 13 - SPECIAL CONSTRUCTION

NOT APPLICABLE

DIVISION 14 - CONVEYING SYSTEMS

NOT APPLICABLE

DIVISION 15 - MECHANICAL

NOT APPLICABLE

DIVISION 16 - ELECTRICAL

16050	Basic Electrical Materials and Methods	6
16145	Lighting Control Devices	3
16442	Panelboards	2
16500	Lighting	2

SECTION 01100 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY OF WORK

- A. Project: Observation Tower Replacement For
Poverty Point State Historic Site
Epps, Louisiana
- B. Owner: Department of Culture, Recreation, and Tourism
Office of State Parks
- C. Architect: **ARCHITECTS +**
618-A Main Street
Baton Rouge, LA 70801
- D. The Contractor shall provide all labor, materials and equipment necessary to complete the following items of work: Contractor will demo existing tower and prepare the area for the construction of the new tower. Contractor will construct a new tower according to manufacturer's directions or customary good trade practices, and in all cases materials and workmanship shall comply with all applicable building codes. Contractor will pour new concrete to match existing grades. Contractor will construct new electrical service for lighting the new tower. Contractor may use existing conduits.

Note: Measurements are approximate. It shall be the responsibility of the Contractor to determine exact measurements.

All materials shall be new, manufactured items suitable for their intended use, installed according to manufacturers' directions or customary good trade practices, and all materials and workmanship shall comply with all applicable building codes. Workmanship shall be at least as good as normal good trade practices with all lines, elevations, surfaces, finishes, etc. like those shown in the plans. Under no circumstances shall the incompetence of the workers be an excuse for substandard work. Unless specifically noted otherwise, all work described in these specifications. And shown in the plans shall be done by the contractor and the final work shall be fully functional.

1.2 WORK RESTRICTIONS

- A. Contractor's Use of Premises:
 - 1. The Contractor shall have free use of restrooms and reasonable use of electrical power and water for construction purposes.
 - 2. The park's maintenance area is designated as the contractor's staging area unless otherwise authorized.
 - 3. In no way shall the contractor's use of the park impair the park's use or condition. The contractor shall promptly repair any damage to the satisfaction of the inspector.

4. Free lodging of laborers on grounds is not permitted, the contractor may reserve cabins and campsites subject the normal fees and regulations applying to the public.

5. The contractor shall be subject to all Park Regulations normally applying to the public.

6. The Contractor shall schedule his work to give no interference park visitation and shall keep utility outages to the minimum length required for construction. Working hours shall be the Park's normal hours of operation unless the Project Inspector authorizes a special schedule.

1.3 OCCUPANCY

A. Occupancy:

1. The Office of State Parks reserves the right to use completed portions of the work before final acceptance. When beneficial occupancy is needed, the inspector shall schedule an inspection to review the work and, if a substantial portion of the work is ready for use, the State may take over part of the work. The contractor shall be relieved of any obligations to maintain that portion of the work. Partial occupancy shall not be a release of responsibility for work not in compliance with the specifications.

1.4 FIELD ENGINEERING

- A. The contractor is responsible for all quantities, measurements, and grades. Provide rough and final staking, elevations and benchmarks as required by the Project Inspector for his approval.

1.5 GRADE, LINES, AND LEVELS

- A. All construction shall be plumb, level, and true to the lines shown on the plans or required in these specifications. All slopes shall be consistent and drain as intended. The Project Inspector shall instruct the contractor on any incidental construction that may be necessary to accomplish a functional project. Slope to drain always.

1.6 REGULATORY REQUIREMENTS

- A. Obtain all permits, pay all fees, record the contract, and comply with all state, federal, and local requirements. All construction shall comply with the Louisiana Building Code for State-Owned Buildings. If any provisions of these specifications or the plans are conflict with any code, the contractor shall notify the Project Inspector before construction or the contractor shall make remedial changes to bring the work into compliance at no additional cost to the state.
- B. Safety is part of this contract. Abide by OSHA and all other safety regulations and take all other measures necessary (such as barriers, fences, warning signs, protective clothing, etc.) to protect the public, workers and property. The contractor shall be responsible for defending the State (at no cost to the State) in all safety related litigation and shall be responsible for the payment of all judgements, both his and the State's.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

1.7 MEASUREMENT AND PAYMENT

- A. Bids - The Contractor's bid shall be a lump sum with no qualifications, informalities, or item payments or the bid will be disqualified.
- B. Add alternates - If add alternates are part of the project the contractor shall note them and their amount on his bid. The low bid, including any add alternates, will be accepted if that bid is within the construction budget, otherwise the bid will be awarded based on the base bid.
- C. Partial payments - See Progress Payments and Acceptance in bid documents. If the contractor requests partial payments, they shall be made using the invoice and schedule of values forms supplied in these specifications. The approved schedule of values shall be based upon the divisions of these specifications except that the value of Division One shall be zero. Upon completion of the project (acceptance), payment will be authorized for 90% of the contract amount (10% retainage) less the value of all punch list items, which shall be computed at 2.5 times the actual cost of the punch list. No partial payments on the punch list. The Project Inspector (from State Parks) decision on payment approval shall be final.
- D. Change orders - All changes in the work involving the contract amount, scope of work, or contract time shall be made only by change orders except where danger to life or property occurs. Change orders shall be prepared by the contractor and submitted to the Project Architect for review. Approval by State Purchasing and the Project Inspector is required before any changes are made. Where danger to life to life and/or property occurs, the contractor shall immediately take all action required for safety of life and property. Any adjustments to the contract required by emergency action will be discussed after danger has passed.

1. Change orders shall contain:

- a. An itemized list of material and labor costs for each subcontractor's work including quantities and unit costs for each item of labor and each item of material.
- b. Same as above for contractor's "labor and material"
- c. Overhead and profit computed by one following method;
 - 1. When all of the work is general contract work - 15% of the cost of the work.
 - 2. When all of the work is subcontract work - 15% of the cost of the work for subcontractor's overhead and profit plus 10% of the cost of the work for general contractor's overhead and profit.
 - 3. When the work is a combination of general contract work and subcontract work – 15% of the cost of subcontract work for subcontractor's overhead and profit plus 10% of the subcontractor's work for contractor's overhead and profit plus 15% of the cost of general contract work for general contractor's overhead and profit.
- d. Time extension for extra work or acts of God.
- e. Quantities - All quantities and dimensions expressed in the plans and these specifications reflect the intent of the project and best knowledge of State Parks. They are for the guidance of the Contractor and

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

shall be verified by the Contractor. If discrepancies or errors exist, the inspector shall be notified before construction.

1.8 PROJECT MEETINGS

A. Project Meetings:

1. A pre-bid conference will be held at the JOB SITE, PRE-BID 11/17/05 AT 10:30 A.M.
Prospective bidders are expected to be familiar with site conditions and bid procedures.
2. A pre-construction conference shall be held before commencing work when the "contractor" shall present to the Project Inspector:
 - a. Project schedules
 - b. List of subcontractors and suppliers
 - c. All requests for "as Equal" determinations, shop drawings, colors, and material certifications.
 - d) Completed schedule of values.
3. Progress meetings shall be held at least monthly to review the progress and quality of the work and to review requests for partial payment.
4. At the completion of work, a Final Inspection shall be held after at least three days notice by the Contractor to prepare a punch list (if necessary) of items to be addressed before acceptance.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)
END OF SECTION 01100

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

SECTION 01300 - ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.1 PROJECT MANAGEMENT AND COORDINATION

- A. Coordinate construction to ensure efficient and orderly installation of each part of the Work.
- B. Conduct progress meetings at Project site at appropriate intervals. Require attendance of each subcontractor or other entity concerned with current progress or involved with planning or coordination of future activities.
 - 1. Architect will record minutes and distribute to each party present and to parties who should have been present.

1.2 SUBMITTALS

- A. As equal determinations- Manufacturer's brand names, colors and models numbers are used for the sole purpose of obtaining competitive bids. Substitutions of products of other manufacturers equal to or superior to those listed may be acceptable if approved by the Inspector before bidding. Otherwise, the Contractor's substitution may be rejected. For a substitution to be pre-approved by the Project Inspector, the Contractor must submit, 10 days before bid date, samples, brochures, and technical data sufficient for the Project Inspector to decide.
- B. Packaging -The Contractor shall retain all packaging and suppliers' invoices in neat, clean, dry, legible condition for the Inspector to decide compliance with these specifications.
- C. Shop drawings - Submit shop drawings wherever required by the plans, these specifications, or when required by the Project Inspector. Such drawings shall be drafted, dimensioned, and scaled drawings clearly showing the contractor's intended plan, materials and the like.
- D. As built drawings - The contractor shall be supplied with prints to maintain a complete set of as built drawings. Note all changes made during the progress of the work neatly in red ink or red pencils and deliver to the inspector at the final inspection.
- E. Project Manuals - At the final inspection, deliver to the Project Inspector three bound copies of a project manual. Such manuals shall include but are not limited to:
 - 1. Manufacturer's manuals, warranties, model numbers parts lists, operating and maintenance procedures, and other information required for all equipment.
 - 2. Lists of products and materials used including color samples and names.
- F.

PART 2 - PRODUCTS (Not Applicable)

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

PART 3 - EXECUTION (Not Applicable)

PART 4 - END OF SECTION 01300

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Use Charges: Cost or use charges for temporary facilities shall be included in the Contract Sum.
- B. Provide temporary utilities as needed at no additional cost to the State.
- C. Electrical Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 TEMPORARY UTILITIES

- A. General: Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.
- C. Sanitary Facilities: Use of Owner's existing toilet facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- D. Heating and Cooling: Provide temporary heating and cooling required for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.
- E. Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

3.2 TEMPORARY SUPPORT FACILITIES

- A. Provide field offices, storage and fabrication sheds, and other support facilities as necessary for construction operations.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

- B. Provide waste-collection containers in sizes adequate to handle waste from construction operations. Collect waste daily and, when containers are full, legally dispose of waste off-site. Comply with requirements of authorities having jurisdiction.

3.3 TEMPORARY SECURITY AND PROTECTION FACILITIES

- A. Provide temporary environmental protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
- C. Provide temporary enclosures for protection of construction and workers from inclement weather and for containment of heat.
- D. Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- E. Furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.

3.4 TERMINATION AND REMOVAL

- A. Temporary Utilities: At earliest feasible time, when acceptable to Owner, change over from use of temporary service to use of permanent service.
- B. Remove temporary facilities and controls no later than Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

END OF SECTION 01500

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

SECTION 01701 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.1 CONTRACT CLOSEOUT

- A. See bidding and contract requirements regarding Final Payments and project meetings regarding acceptance, punch list, and final inspection. After completion, the Contractor shall remove all scraps, forms, packaging, debris, spatters, dust, dirt, etc., and leave the work in a neat and clean condition with all facilities ready for use by the Office of State Parks. Materials deemed waste by the Inspector shall be removed from the park by the Contractor.
- B. Record Drawings: Maintain a set of prints of the Contract Drawings as Record Drawings. Mark to show actual installation where installation varies from that shown originally.
 - 1. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
- C. Operation and Maintenance Data: Submit one copy of manual. Organize data into three-ring binders with identification on front and spine of each binder, and envelopes for folded drawings. Include the following:
 - 1. Manufacturer's operation and maintenance documentation.
 - 2. Maintenance and service schedules.
 - 3. Maintenance service contracts.
 - 4. Emergency instructions.
 - 5. Spare parts list.
 - 6. Wiring diagrams.
 - 7. Copies of warranties.

1.2 WARRANTIES AND BONDS

- A. All materials and workmanship shall be warranted for one year from the date of acceptance. All defects shall be promptly corrected by the Contractor and at no cost to the State.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. Examine substrates and conditions for compliance with manufacturer's written requirements including, but not limited to, surfaces that are sound, level, plumb, smooth, clean, and free of deleterious substances;

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

substrates within installation tolerances; and application conditions within environmental limits. Proceed with installation only after unsatisfactory conditions have been corrected.

- B. Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to property survey and existing benchmarks.
- C. Take field measurements as required to fit the Work properly. Where fabricated products are to be fitted to other construction, verify dimensions by field measurement before fabrication and, when possible, allow for fitting and trimming during installation.

3.2 CUTTING AND PATCHING

- A. Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.
- B. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.

3.3 INSTALLATION

- A. Comply with manufacturer's written instructions for installation. Anchor each product securely in place, accurately located and aligned with other portions of the Work. Clean exposed surfaces and protect from damage.
- B. Clean Project site and work areas daily, including common areas.

3.4 FINAL CLEANING

- A. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion:
 - 1. Remove labels that are not permanent.
 - 2. Clean transparent materials, including mirrors. Remove excess glazing compounds. Replace chipped or broken glass.
 - 3. Clean exposed finishes to a dust-free condition, free of stains, films, and foreign substances. Sweep concrete floors broom clean.
 - 4. Vacuum carpeted surfaces and wax resilient flooring.
 - 5. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication. Clean plumbing fixtures. Clean light fixtures, lamps, globes, and reflectors.
 - 6. Clean Project site, yard, and grounds, in areas disturbed by construction activities. Sweep paved areas; remove stains, spills, and foreign deposits. Rake grounds to a smooth, even-textured surface.

3.5 CLOSEOUT PROCEDURES

- A. Substantial Completion: Before requesting Substantial Completion inspection, complete the following:

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
2. Advise Owner of pending insurance changeover requirements.
3. Submit specific warranties, maintenance service agreements, and similar documents.
4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
5. Submit Record Drawings and Specifications, operation and maintenance manuals, and similar final record information.
6. Deliver tools, spare parts, extra materials, and similar items.
7. Make final changeover of permanent locks and deliver keys to Owner.
8. Complete startup testing of systems.
9. Remove temporary facilities and controls.
10. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
11. Complete final cleaning requirements, including touchup painting.
12. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

END OF SECTION 01701

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

SECTION 01732 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Items indicated to be removed and salvaged remain Owner's property. Remove, clean, and deliver to Owner's designated storage area.
- B. Comply with EPA regulations and hauling and disposal regulations of authorities having jurisdiction.
- C. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- D. It is not expected that hazardous materials will be encountered in the Work. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Owner will remove hazardous materials under a separate contract.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 DEMOLITION

- A. Demo: existing tower. Remove existing framing, supports and concrete associated with the structure. "Any building materials that may be encountered in the area of construction. Any damage to existing facilities due to demo work will be repaired by contractor at no cost to the owner. Conduct demolition to minimize interference with operations of the state park. Remove all material produced by or used during demo from site as soon as possible unless directed by Project Manager. (Not to have site undesirable.)
- B. Maintain services/systems indicated to remain and protect them against damage during selective demolition operations. Before proceeding with demolition, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of the building.
- C. Locate, identify, shut off, disconnect, and cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
- D. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- E. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction.
- F. Promptly remove demolished materials from Owner's property and legally dispose of them. Do not burn demolished materials.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site¹

END OF SECTION 01732

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

SECTION 02230 - SITE CLEARING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
- B. Salvable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.
- C. Notify utility locator service for area where Project is located before site clearing.
- D. Do not begin site-clearing operations until temporary erosion and sedimentation control measures are in place.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance.
- B. Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
- C. Protect site improvements to remain from damage. Restore damaged improvements to condition existing before start of site clearing.
- D. Locate and clearly flag trees and vegetation to remain or to be relocated.
- E. Protect remaining trees and shrubs from damage and maintain vegetation. Employ a licensed arborist to repair tree and shrub damage. Restore damaged vegetation. Replace damaged trees that cannot be restored to full growth, as determined by arborist.
- F. Do not store materials or equipment or permit excavation within drip line of remaining trees.
- G. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed.
 - 1. Arrange with utility companies to shut off indicated utilities.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

3.2 SITE CLEARING

- A. Remove obstructions, trees, shrubs, grass, and other vegetation to permit installation of new construction. Removal includes digging out stumps and obstructions and grubbing roots.
- B. Strip topsoil. Stockpile topsoil that will be reused in the Work.
 - 1. Stockpile surplus topsoil to allow for resspreading deeper topsoil.
- C. Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.
- D. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
 - 1. Neatly saw-cut length of existing pavement to remain before removing existing pavement.
- E. In areas not to be further excavated, fill depressions resulting from site clearing. Place and compact satisfactory soil materials in 6-inch- thick layers to density of surrounding original ground.
- F. Dispose of waste materials, including trash, debris, and excess topsoil, off Owner's property. Burning waste materials on-site is not permitted.
 - 1. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities.

END OF SECTION 02230

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

SECTION 03300 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data.
- B. Ready-Mixed Concrete Producer Qualifications: ASTM C 94/C 94M.
- C. Comply with ACI 301, "Specification for Structural Concrete"; ACI 117, "Specifications for Tolerances for Concrete Construction and Materials"; and CRSI's "Manual of Standard Practice."

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.
- B. Plain Steel Wire: ASTM A 82, as drawn.
- C. Plain-Steel Welded Wire Reinforcement: ASTM A 185, fabricated from as-drawn steel wire into flat sheets.
- D. Deformed-Steel Welded Wire Reinforcement: ASTM A 497, flat sheet.
- E. Portland Cement: ASTM C 150, Type I or II.
- F. Aggregates: ASTM C 33, uniformly graded.
- G. Air-Entraining Admixture: ASTM C 260.
- H. Chemical Admixtures: ASTM C 494. Do not use calcium chloride or admixtures containing calcium chloride.
- I. Vapor Retarder: Clear 10-mil- thick polyethylene sheet.
- J. Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber, or ASTM D 1752, cork or self-expanding cork.
- K. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- L. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B.
- M. Clear, Solvent-Borne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.
- N. Clear, Waterborne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

2.2 MIXES

- A. Comply with ACI 301 requirements for concrete mixtures.
- B. Normal-Weight Concrete: Prepare design mixes, proportioned according to ACI 301, as follows:
 - 1. Minimum Compressive Strength: 3000 psi at 28 days.
 - 2. Maximum Water-Cementitious Materials Ratio: 0.50.
 - 3. Slump Limit: 5 inches, plus or minus 1 inch.
 - 4. Air Content: Maintain within range permitted by ACI 301. Do not allow air content of floor slabs to receive troweled finishes to exceed 3 percent.
- C. Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M.
 - 1. When air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 CONCRETING

- A. Construct formwork according to ACI 301 and maintain tolerances and surface irregularities within ACI 347R limits of Class A, 1/8 inch for concrete exposed to view and Class C, 1/2 inch for other concrete surfaces.
- B. Place vapor retarder on prepared subgrade, with joints lapped 6 inches and sealed.
- C. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- D. Install construction, isolation, and contraction joints where indicated. Install full-depth joint-filler strips at isolation joints.
- E. Place concrete in a continuous operation and consolidate using mechanical vibrating equipment.
- F. Protect concrete from physical damage, premature drying, and reduced strength due to hot or cold weather during mixing, placing, and curing.
- G. Formed Surface Finish: Smooth-formed finish for concrete exposed to view, coated, or covered by waterproofing or other direct-applied material; rough-formed finish elsewhere.
- H. Slab Finishes: Comply with ACI 302.1R for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces. Provide the following finishes:
 - 1. Scratch finish for surfaces to receive mortar setting beds.
 - 2. Float finish for interior steps and ramps and surfaces to receive waterproofing, roofing, or other direct-applied material.
 - 3. Troweled finish for floor surfaces and floors to receive floor coverings, paint, or other thin film-finish coatings.
 - 4. Trowel and fine-broom finish for surfaces to receive thin-set tile.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

5. Nonslip-broom finish to exterior concrete platforms, steps, and ramps.

I. Cure formed surfaces by moist curing for at least seven days.

J. Begin curing concrete slabs after finishing. Apply membrane-forming curing and sealing compound to concrete.

K. Owner will engage a testing agency to perform field tests and to submit test reports.

L. Protect concrete from damage. Repair surface defects in formed concrete and slabs.

END OF SECTION 03300

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

SECTION 05120 - STRUCTURAL STEEL

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data.
- B. Comply with AISC's "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design," RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts," and AWS D1.1, "Structural Welding Code--Steel."

PART 2 - PRODUCTS

2.1 STRUCTURAL STEEL AND ACCESSORIES

- A. Structural-Steel Shapes, Plates, and Bars: ASTM A 36/A 36M, carbon steel.
- B. Cold-Formed Structural-Steel Tubing: ASTM A 500, Grade B.
- C. Steel Pipe: ASTM A 53, Type E or S, Grade B, standard weight (Schedule 40), black finish.
- D. Anchor Rods, Bolts, Nuts: ASTM A 325, headed bolts, Type 1, heavy hex steel structural bolts and heavy hex carbon-steel nuts.
- E. Bolts, Nuts, and Washers: ASTM A 325, Type 1, high-strength heavy hex steel structural bolts, heavy hex carbon-steel nuts, and hardened carbon-steel washers, uncoated.
- F. Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd, rust-inhibiting primer.
- G. Grout: ASTM C 1107, nonmetallic, shrinkage resistant, premixed.

2.2 FABRICATION

- A. Fabricate structural steel according to AISC specifications and tolerance limits of AISC's "Code of Standard Practice for Steel Buildings and Bridges" for structural steel.
- B. Shop Priming: Prepare surfaces according to SSPC-SP 2, "Hand Tool Cleaning" or SSPC-SP 3, "Power Tool Cleaning." Shop prime steel to a dry film thickness of at least 1.5 mils. Do not prime surfaces to be embedded in concrete or mortar or to be field welded.

PART 3 - EXECUTION

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

3.1 ERECTION

- A. Erect structural steel according to AISC specifications and within erection tolerances of AISC's "Code of Standard Practice for Steel Buildings and Bridges."
- B. Set base and bearing plates on wedges, shims, or setting nuts. Tighten anchor bolts, cut off wedges or shims flush with edge of plate, and pack grout solidly between bearing surfaces and plates.
- C. Bolted Connections: Install and tighten nonhigh-strength bolts, unless high-strength bolts are indicated. Snug tighten high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
- D. Weld Connections: Comply with AWS D1.1.

END OF SECTION 05120

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

SECTION 05210 - STEEL JOISTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data.
- B. Comply with recommendations of SJI's "Standard Specifications Load Tables and Weight Tables for Steel Joists and Joist Girders" and AWS D1.1, "Structural Welding Code--Steel."

PART 2 - PRODUCTS

2.1 JOISTS AND ACCESSORIES

- A. Bolts, Nuts, and Washers: ASTM A 325, Type 1, high-strength heavy hex steel structural bolts, heavy hex carbon-steel nuts, and hardened carbon-steel washers, uncoated.
- B. Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd, rust-inhibiting primer.
- C. Manufacture joists according to "Standard Specifications for Open Web Steel Joists, K-Series," in SJI's "Specifications" with steel angle top and bottom chord members.
- D. Manufacture joists girders according to "Standard Specifications for Joist Girders" in SJI's "Specifications" with steel angle top and bottom chord members.
- E. Bridging: Provide bridging anchors and horizontal or diagonal bridging according to SJI's "Specifications."
- F. Shop Priming: Prepare surfaces according to SSPC-SP 2 or SSPC-SP 3. Shop prime steel joists to a dry film thickness at least 1 mil.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install joists and accessories plumb, square, and true to line; securely fasten to supporting construction according to SJI's "Specifications."
- B. Field weld joists to supporting steel bearing plates.
- C. Bolt joists to supporting steel framework using high-strength structural bolts, unless otherwise indicated. Install and tighten high-strength structural bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or ASTM A 490 Bolts."

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

- D. Install and connect bridging concurrently with joist erection before construction loads are applied. Anchor ends of bridging lines at top and bottom chords where terminating at walls or beams.

END OF SECTION 05210

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

SECTION 05400 - COLD-FORMED METAL FRAMING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data.
- B. Comply with AISI's "Specification for the Design of Cold-Formed Steel Structural Members" for calculating structural characteristics of cold-formed metal framing.
- C. Comply with HUD's "Prescriptive Method for Residential Cold-Formed Metal Framing."
- D. Comply with AWS D1.3, "Structural Welding Code--Sheet Steel."
- E. Protect cold-formed metal framing from corrosion, deformation, and other damage during delivery, storage, and handling.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Galvanized Steel Sheet: ASTM A 653/A 653M, G60 zinc coated; Structural Steel (SS); Grade 50, Class 1 or 2.
- B. Steel Studs: C-shaped, with flange width of not less than 1-5/8 inches, minimum uncoated steel thickness of 0.0677 inch, and of depths indicated.
- C. Steel Joists: C-shaped, with flange width of not less than 1-5/8 inches, minimum uncoated steel design thickness of 0.0677 inch, and of depths indicated.
- D. Steel Track: U-shaped, minimum uncoated metal thickness same as joists used with track, with flange widths of 1-5/8 inches for joists, of web depths indicated.

2.2 ACCESSORIES

- A. Accessories: Fabricate from the same material and finish used for framing members, of manufacturer's standard thickness and configuration, unless otherwise indicated.
- B. Cast-in-Place Anchor Bolts: ASTM F 1554, Grade 36, threaded carbon-steel hex-headed bolts and carbon-steel nuts; and flat, hardened-steel washers; zinc coated by hot-dip process according to ASTM A 153/A 153M, Class C.
- C. Mechanical Fasteners: Corrosion-resistant coated, self-drilling, self-threading steel drill screws.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

- D. Insulation: ASTM C 665, Type I, unfaced mineral-fiber blankets.
- E. Galvanizing Repair Paint: SSPC-Paint 20 or DOD-P-21035.

PART 3 - EXECUTION

3.1 FRAMING

- A. Install framing and accessories level, plumb, square, and true to line, and securely fastened, according to ASTM C 1007. Temporarily brace framing until entire integrated supporting structure has been completed and permanent connections are secured.
 - 1. Cut framing members by sawing or shearing; do not torch cut.
 - 2. Fasten framing members by welding or screw fastening.
 - 3. Install insulation in built-up exterior framing members.
 - 4. Fasten reinforcement plates over web penetrations larger than standard punched openings.
- B. Erection Tolerances: Install cold-formed metal framing with a maximum variation of 1/8 inch in 10 feet and with individual framing members no more than plus or minus 1/8 inch from plan location. Cumulative error shall not exceed minimum fastening requirements of sheathing or other finishing materials.
- C. Studs: Install continuous top and bottom tracks securely anchored at corners and ends. Squarely seat studs against webs of top and bottom tracks. Space studs as indicated, set plumb, align, and fasten both flanges of studs to top and bottom tracks.
 - 1. Install and fasten horizontal bridging in stud system, spaced in rows not more than 48 inches apart.
 - 2. Install steel-sheet diagonal bracing straps to both stud flanges, terminate at and fasten to reinforced top and bottom track and anchor to structure.
 - 3. Install miscellaneous framing and connections to provide a complete and stable wall-framing system.
 - 4. Isolate non-load-bearing curtain-wall framing from building structure using vertical slide clips or deflection track to prevent transfer of vertical loads while providing lateral support.
- D. Joists: Install and securely anchor perimeter joist track sized to match joists. Install joists bearing on supporting framing, brace and reinforce, and fasten to both flanges of joist track.
 - 1. Install bridging and fasten bridging at each joist intersection.
 - 2. Install miscellaneous joist framing and connections, including web stiffeners, closure pieces, clip angles, continuous angles, hold-down angles, anchors, and fasteners.

END OF SECTION 05400

SECTION 05520 - RAILINGS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Structural Performance: Provide railings capable of withstanding structural loads required by ASCE 7.
 - 1. For glass-supported railings, support each section of top rail by a minimum of three glass panels or by other means so top rail will remain in place if any one panel fails.
- B. Submittals: Product Data.

PART 2 - PRODUCTS

2.1 METALS

- A. Bronze, Extruded Shapes: ASTM B 455, alloy UNS No. C38500 (architectural bronze).
- B. Bronze, Seamless Tubing: ASTM B 135, alloy UNS No. C23000 (red brass, 85 percent copper).
- C. Stainless-Steel Tubing: ASTM A 554, Grade MT 304.
- D. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- E. Steel Pipe: ASTM A 53, Schedule 40.
- F. Steel Tubing: ASTM A 500 (cold formed) or ASTM A 513, Type 5 (mandrel drawn).
- G. Iron Castings: ASTM A 47, Grade 32510 or ASTM A 48, Class 30.
- H. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails, unless otherwise indicated.

2.2 OTHER MATERIALS

- A. Stainless Steel Wire: ASTM A 554, Grade MT 304.

2.3 FABRICATION

- A. Assemble railing systems in shop to the greatest extent possible. Use connections that maintain structural value of joined pieces.
- B. Form changes in direction of railing members by use of prefabricated fittings.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

- C. Fabricate railing systems and handrails for connecting members with concealed mechanical fasteners and fittings.
- D. Provide manufacturer's standard wall brackets, flanges, miscellaneous fittings, and anchors to connect handrail and railing members to other construction.
- E. Provide wall returns at ends of wall-mounted handrails.

2.4 FINISHES

- A. Steel Railings: Hot-dip galvanized after fabrication, ASTM A 123; cleaned and shop primed after galvanizing.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Fit exposed connections accurately together to form tight, hairline joints.
- B. Set railings accurately in location, alignment, and elevation and free of rack.
- C. Coat concealed surfaces of aluminum that will be in contact with cementitious materials or dissimilar metals, with a heavy coat of bituminous paint.
- D. Anchor posts in concrete by forming or core-drilling holes 5 inches deep and 3/4 inch greater than OD of post. Fill annular space between post and concrete with nonshrink, nonmetallic grout.
- E. Attach handrails to wall with wall brackets.

END OF SECTION 05520

SECTION 06200 - FINISH CARPENTRY

PART 1 - GENERAL (Not Applicable)

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. Lumber: DOC PS 20 and grading rules of inspection agencies certified by American Lumber Standards Committee Board of Review.
- B. Softwood Plywood: DOC PS 1.
- C. Hardwood Plywood: HPVA HP-1.

2.2 EXTERIOR FINISH CARPENTRY

- A. Exterior Lumber Trim: Smooth-textured, "Trex" Decking or approved equal.
- B. Lumber Siding: Smooth-textured, "Trex" Decking or approved equal.

2.3 STAIRS AND RAILINGS

- A. Exterior Treads: 1-1/4-inch, "Trex" Decking or approved equal stepping with half-round nosing.
- B. Exterior Risers: 3/4-inch "Trex" Decking or approved equal.

2.4 MISCELLANEOUS MATERIALS

- A. Fasteners for Exterior Finish Carpentry: Stainless-steel nails.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Condition finish carpentry in installation areas for 24 hours before installing.
- B. Prime and backprime lumber for painted finish exposed on the exterior.
- C. Install finish carpentry level, plumb, true, and aligned with adjacent materials. Scribe and cut to fit adjoining work. Refinish and seal cuts.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

- D. Install standing and running trim with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Stagger joints in adjacent and related trim. Cope at returns and miter at corners.
- E. Nail siding at each stud. Do not allow nails to penetrate more than one thickness of siding, unless otherwise recommended by siding manufacturer. Seal joints at inside and outside corners and at trim locations.
- F. Select and arrange paneling for best match of adjacent units. Install with uniform tight joints.

END OF SECTION 06200

SECTION 07411 - METAL ROOF PANELS**PART 1 - GENERAL****1.1 SECTION REQUIREMENTS**

- A. Summary: Factory-formed metal roof panels, fasciae, and trim.
- B. Submittals: Product Data and color Samples.
- C. Provide roof assemblies that comply with requirements in UL 580 for Class 90 wind-uplift resistance.
- D. Warranties: Provide standard manufacturer's written warranty, without monetary limitation, signed by manufacturer agreeing to promptly repair or replace metal roof panels that fail to remain weathertight within 10 years from date of Substantial Completion.

PART 2 - PRODUCTS**2.1 METAL ROOF PANELS**

- A. Roof Panel Type: concealed-fastener, lap-seam metal roof panels.
- B. Aluminum Roof Panels: Fabricated from aluminum sheet, ASTM B 209 for alclad Alloy 3003, 3004, or 3105.
 - 1. Metal Thickness: 0.040 inch.
 - 2. Finish: Manufacturer's standard epoxy primer and silicone-modified, polyester-enamel topcoat.

2.2 ACCESSORIES

- A. Provide components required for a complete roof panel assembly including trim, fasciae, clips, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
- B. Flashing and Trim: Formed from 0.0179-inch- thick, zinc-coated (galvanized) steel sheet or aluminum-zinc alloy-coated steel sheet. Provide flashing and trim as required to seal against weather and to provide finished appearance. Finish flashing and trim with same finish system as adjacent metal roof panels.
- C. Underlayment: Self-adhering, polyethylene-faced, polymer-modified, bituminous sheet ASTM D 1970; 40 mils thick
- D. Slip Sheet: Rosin-sized building paper, 5 lb/100 sq. ft..
- E. Thermal Spacers: Where panels attach directly to purlins, provide thermal spacers recommended by panel manufacturer.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

- F. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil dry film thickness per coat.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install underlayment on roof sheathing under metal roof panels, unless otherwise recommended by metal roof panel manufacturer.
 - 1. Apply slip sheet over underlayment before installing metal roof panels.
- B. Anchor panels securely in place, with provisions for thermal and structural movement. Field cutting exterior panels by torch is not permitted. Install panels with concealed fasteners, unless otherwise indicated.
 - 1. Steel Roof Panels: Use stainless-steel fasteners for surfaces exposed to the exterior and galvanized steel fasteners for surfaces exposed to the interior.
 - 2. Aluminum Roof Panels: Use aluminum or stainless-steel fasteners for surfaces exposed to the exterior and aluminum or galvanized steel fasteners for surfaces exposed to the interior.
- C. Install gaskets, joint fillers, and sealants where required for weatherproof performance of metal roof panel assemblies. Provide types of gaskets, fillers, and sealants recommended by metal roof panel manufacturer.
- D. Separate dissimilar metals with a bituminous coating or polymer-modified bituminous sheet underlayment.
- E. Coat back side of aluminum panels with bituminous coating where they will contact wood, ferrous metal, or cementitious construction.

END OF SECTION 07411

SECTION 07620 - SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data and Samples.
- B. Comply with SMACNA's "Architectural Sheet Metal Manual." Conform to dimensions and profiles shown unless more stringent requirements are indicated.
- C. Coordinate installation of sheet metal flashing and trim with interfacing and adjoining construction to provide a leakproof, secure, and noncorrosive installation.

PART 2 - PRODUCTS

2.1 SHEET METAL

- A. Copper: ASTM B 370; Temper H00 or H01, cold rolled, not less than 16 oz./sq. ft..
- B. Aluminum Sheet: ASTM B 209, Alloy 3003, 3004, 3105, or 5005, temper suitable for forming and structural performance required, but not less than H14; not less than 0.032 inch thick; and with mill finish finished as follows:
 - 1. Fluoropolymer 2-Coat System: Manufacturer's standard system with topcoat containing not less than 70 percent polyvinylidene fluoride resin by weight; complying with AAMA 2604.
- C. Stainless-Steel Sheet: ASTM A 240/A 240M, Type 304, with No. 2D finish; not less than 0.0156 inch thick.
- D. Zinc-Tin Alloy-Coated Stainless Steel: ASTM A 240/A 240M, Type 304, dead-soft, fully annealed stainless-steel sheet, coated on both sides with a zinc-tin alloy (50 percent zinc, 50 percent tin); not less than 0.015 inch thick.
- E. Lead Sheet: ASTM B 749, Type L51121, copper-bearing lead sheet, minimum thickness of 0.0625 inch except at least 0.0937 inch thick for applications where burning (welding) is involved.

2.2 FLASHING AND TRIM

- A. Fabricate sheet metal flashing and trim to comply with recommendations of SMACNA's "Architectural Sheet Metal Manual" that apply to the design, dimensions, metal, and other characteristics of the item indicated.

2.3 ACCESSORIES

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

- A. General: Provide materials and types of fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with SMACNA's "Architectural Sheet Metal Manual." Allow for thermal expansion; set true to line and level. Install Work with laps, joints, and seams permanently watertight and weatherproof; conceal fasteners where possible.
 - 1. Roof-Edge Flashings: Secure metal flashings at roof edges according to FMG Loss Prevention Data Sheet 1-49 for specified wind zone.
- B. Sealed Joints: Form nonexpansion, but movable, joints in metal to accommodate elastomeric sealant to comply with SMACNA standards.
- C. Fabricate nonmoving seams in sheet metal with flat-lock seams. For metals other than aluminum, tin edges to be seamed, form seams, and solder.
 - 1. Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets to be soldered to a width of 1-1/2 inches, unless pre-tinned surface would show in finished Work.
- D. Separation: Separate noncompatible metals or corrosive substrates with a coating of asphalt mastic or other permanent separation.

END OF SECTION 07620

SECTION 16050 - BASIC ELECTRICAL MATERIALS AND METHODS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data.
- B. Coordinate Arrangement, Mounting, and Support of Electrical Equipment:
 - 1. Allow maximum possible headroom unless specific mounting heights that reduce headroom are indicated.
 - 2. Provide for ease of disconnecting the equipment with minimum interference to other installations.
 - 3. Allow right of way for piping and conduit installed at required slope.
 - 4. Ensure that connecting raceways, cables, wireways, cable trays, and busways are clear of obstructions and of the working and access space of other equipment.
- C. Coordinate installation of required supporting devices and set sleeves in cast-in-place concrete, masonry walls, and other structural components as they are constructed.
- D. Coordinate location of access panels and doors for electrical items that are behind finished surfaces or otherwise concealed. Access doors and panels are specified in Division 8 Section "Access Doors and Frames."

PART 2 - PRODUCTS

2.1 RACEWAYS AND CONDUCTORS

- A. Raceways:
 - 1. EMT: ANSI C80.3, zinc-coated steel, with set-screw or compression fittings.
 - 2. FMC: Zinc-coated steel.
 - 3. IMC: ANSI C80.6, zinc-coated steel, with threaded fittings.
 - 4. LFMC: Zinc-coated steel with sunlight-resistant and mineral-oil-resistant plastic jacket.
 - 5. RNC: NEMA TC 2, Schedule 40 PVC, with NEMA TC3 fittings.
 - 6. Raceway Fittings: Specifically designed for raceway type used in Project.
- B. Conductors:
 - 1. Conductors, No. 10 AWG and Smaller: Solid or stranded copper.
 - 2. Conductors, Larger Than No. 10 AWG: Stranded copper.
 - 3. Insulation: Thermoplastic, rated at 75 deg C minimum.
 - 4. Wire Connectors and Splices: Units of size, ampacity rating, material, type, and class suitable for service indicated.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

2.2 ELECTRICAL IDENTIFICATION MATERIALS

A. Raceway Identification Materials:

1. Snap-around, color-coding bands; flexible, pre-printed, color-coded acrylic.
2. Self-adhesive, color-coding vinyl tape; flexible, pre-printed, self-adhesive vinyl.

B. Conductor Identification Materials:

1. Color-Coding Conductor Tape: Self-adhesive vinyl tape 1 to 2 inches wide.

C. Underground-Line Warning Tape: Permanent, bright-colored, continuous-printed, polyethylene tape with continuous metallic strip or core.

D. Tape Markers for Wire: Vinyl, self-adhesive, wraparound type with pre-printed numbers and letters.

E. Warning Labels and Signs: Baked-enamel, pre-printed signs, punched or drilled for fasteners; with colors, legend, and size required for application.

F. Equipment Identification Labels: Engraved, laminated acrylic or melamine label; punched or drilled for screw mounting. White letters on a dark-gray background; red letters for emergency systems.

1. Fasteners: Self-tapping, stainless-steel screws or stainless-steel machine screws with nuts and flat and lock washers.

2.3 SUPPORT AND ANCHORAGE COMPONENTS

A. Steel Slotted Support Systems: MFMA-3, factory-fabricated components for field assembly.

B. Raceway and Cable Supports: As described in NECA 1.

C. Conduit and Cable Support Devices: Steel and malleable-iron hangers, clamps, and fittings.

D. Pipe Sleeves: Schedule 40, galvanized steel, plain ends.

E. Mounting, Anchoring, and Attachment Components:

1. Powder-Actuated Fasteners: Threaded-steel stud.
2. Expansion Anchors: Steel, insert-wedge type, for use in concrete.
3. Concrete Inserts: Steel or malleable-iron slotted-support-system units.
4. Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached structural element.
5. Through Bolts: Structural type, hex head, high strength; comply with ASTM A 325.
6. Toggle Bolts: All-steel springhead type.
7. Hanger Rods: Threaded steel.

2.4 SEISMIC-RESTRAINT COMPONENTS

- A. Rated Strength, Features, and Application Requirements for Restraint Components: As defined in reports by an agency acceptable to authorities having jurisdiction.
 - 1. Structural Safety Factor: Strength in tension, shear, and pullout force of components used shall be at least five times the maximum seismic forces to which they will be subjected.
- B. Angle and Channel-Type Brace Assemblies: Steel angles or steel slotted-support-system components; with accessories for attachment to braced component at one end and to building structure at the other end.
- C. Cable Restraints: ASTM A 603, zinc-coated, steel wire rope attached to steel or stainless-steel thimbles, brackets, swivels, and bolts designed for restraining cable service.
 - 1. Seismic Mountings, Anchors, and Attachments: Select to resist seismic forces.
 - 2. Hanger Rod Stiffener: Steel slotted-channel support clamped to hanger rod.
 - 3. Bushings for Floor- and Wall-Mounted Equipment Anchors: Neoprene units designed for seismically rated rigid equipment mountings.
- D. Sleeve Seals: Modular, to fill annular space between sleeve and raceway or cable; EPDM interlocking links with pressure plates, and connecting bolts and nuts.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Sleeve and Sleeve Seals: Use type and number of sealing elements recommended by manufacturer; comply with NECA 1.

3.2 RACEWAY APPLICATION

- A. Outdoor Installations:
 - 1. Exposed or Concealed: IMC.
 - 2. Underground, Single Run: RNC.
 - 3. Connection to Vibrating Equipment: LFMC.
 - 4. Boxes and Enclosures: Metallic, NEMA 250, Type 3R or Type 4.
- B. Indoor Installations:
 - 1. Exposed or Concealed: EMT.
 - 2. Connection to Vibrating Equipment: FMC; in wet or damp locations, use LFMC.
 - 3. Damp or Wet Locations: IMC.
 - 4. Boxes and Enclosures: Metallic, NEMA 250, Type 1, unless otherwise indicated.

3.3 RACEWAY AND CABLE INSTALLATION

- A. Conceal raceways and cables, unless otherwise indicated, within finished walls, ceilings, and floors.

- B. Install raceways and cables at least 6 inches away from parallel runs of flues and steam or hot-water pipes. Locate horizontal raceway runs above water and steam piping.
- C. Install raceways embedded in slabs in middle third of slab thickness where practical, and leave at least 1-inch-thick concrete cover.
 - 1. Secure raceways to reinforcing rods to prevent sagging or shifting during concrete placement.
 - 2. Space raceways laterally to prevent voids in concrete.
 - 3. Install conduit larger than 1-inch trade size parallel to or at right angles to main reinforcement. Where conduit is at right angles to reinforcement, place conduit close to slab support.
 - 4. Transition from nonmetallic tubing to Schedule 80 nonmetallic conduit, rigid steel conduit, or IMC before rising above floor.
- D. Install pull wires in empty raceways.
- E. Install telephone and signal system raceways, 2-inch trade size and smaller, in maximum lengths of 150 feet and with a maximum of two 90-degree bends or equivalent.
- F. Connect motors and equipment subject to vibration, noise transmission, or movement with a 72-inch maximum length of flexible conduit. Install LFMC in wet or damp locations.

3.4 WIRING METHODS FOR POWER, LIGHTING, AND CONTROL CIRCUITS

- A. Feeders: Type THHN/THWN insulated conductors in raceway.
- B. Underground Feeders and Branch Circuits: Type THWN or single-wire, Type UF insulated conductors in raceway.
- C. Branch Circuits: Type THHN/THWN insulated conductors in raceway.
- D. Branch Circuits: Type THW or THHN/THWN insulated conductors in raceway where exposed. Metal-clad cable where concealed in ceilings and gypsum board partitions.
- E. Branch Circuits: Type THW or THHN/THWN insulated conductors in raceway where exposed. Armored or nonmetallic sheathed cable where permitted by authorities having jurisdiction and where concealed in ceilings and gypsum board partitions.
- F. Remote-Control Signaling and Power-Limited Circuits: Type THHN/THWN insulated conductors in raceway for Classes 1, 2, and 3, unless otherwise indicated.

3.5 APPLICATION OF IDENTIFICATION MATERIALS

- A. Power-Circuit Conductor Identification: For No. 3 AWG conductors and larger, at each location where observable, identify phase using color-coding conductor tape.
- B. Locations of Underground Lines: Identify with underground-line warning tape for power, lighting, communication, and control wiring.

- C. Warning Labels for Enclosures for Power and Lighting: Comply with 29 CFR 1910.145; identify system voltage with black letters on an orange background. Apply to exterior of door, cover, or other access.
- D. Equipment Identification Labels:
 - 1. Labeling Instructions: Provide a single line of text with 1/2-inch- high letters on 1-1/2-inch- high label.
 - 2. Equipment to Be Labeled:
 - a. Panelboards.
 - b. Electrical switchboards.
 - c. Transformers.
 - d. Motor starters.
 - e. Push-button stations.
 - f. Contactors.
 - g. Terminals, racks, and patch panels for voice and data communication and for signal and control functions.

3.6 INSTALLATION OF IDENTIFICATION MATERIALS

- A. Verify identity of each item before installing identification products.
- B. System Identification Color Banding for Raceways and Cables: At 50-foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.
- C. Color-Coding for Phase and Voltage Level Identification, 600 V and Less: Ungrounded service, feeder, and branch-circuit conductors.
 - 1. 208/120-V Circuits:
 - a. Phase A: Black.
 - b. Phase B: Red.
 - c. Phase C: Blue.
 - 2. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches from terminal points.
- D. Underground-Line Warning Tape: Continuous underground-line warning tape directly above line at 6 to 8 inches below finished grade.

3.7 INSTALLATION OF SUPPORTS

- A. Multiple Raceways or Cables: Install on trapeze-type supports fabricated with steel slotted channel.
- B. Install seismic-restraint components using methods approved by the evaluation service providing required submittals for component.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

- C. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits.

3.8 SEISMIC REQUIREMENTS

A. Installation Of Seismic-Restraint Components:

1. Install bushing assemblies for anchor bolts for wall- and floor-mounted equipment, arranged to provide resilient media between anchor bolt and mounting hole in substrate.
2. Attachment to Structure: If specific attachment is not indicated, anchor bracing to structure at flanges of beams, upper truss chords of bar joists, or at concrete members.

- B. Accommodation of Differential Seismic Motion: Make flexible connections in runs of raceways, cables, wireways, cable trays, and busways where they cross expansion and seismic-control joints, where adjacent sections or branches are supported by different structural elements, and where they terminate with connection to electrical equipment that is anchored to a different structural element than the one supporting them as they approach equipment.

3.9 FIRESTOPPING

- A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly. Firestopping materials and installation requirements are specified in Division 7 Section "Through-Penetration Firestop Systems."

END OF SECTION 16050

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SECTION 16145 - LIGHTING CONTROL DEVICES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data and Shop Drawings:
 - 1. Installation details for lighting control devices.
 - 2. Interconnection diagrams showing field-installed wiring.
- B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 GENERAL LIGHTING CONTROL DEVICE REQUIREMENTS

- A. Line-Voltage Surge Protection: An integral part of the devices for 120- and 277-V solid-state equipment. For devices without integral line-voltage surge protection, field-mounting surge protection shall comply with IEEE C62.41 and with UL 1449.

2.2 OUTDOOR PHOTOELECTRIC SWITCHES

- A. Description: Solid state, with SPST dry contacts rated for 1800-VA tungsten or 1000-VA inductive, to operate connected relay, contactor coils, and microprocessor input; complying with UL 773A.

2.3 SWITCH-BOX OCCUPANCY SENSORS

- A. Description: PIR type with integral power-switching contacts rated for 800 W at 120-V ac, suitable for incandescent light fixtures, fluorescent light fixtures with magnetic or electronic ballasts, or 1/6-hp motors; and rated for 1000 W at 277-V ac, suitable for incandescent light fixtures, fluorescent light fixtures with magnetic or electronic ballasts, or 1/3-hp motors, minimum.
 - 1. Include ground wire.
 - 2. Automatic Light-Level Sensor: Adjustable from 2 to 200 fc; keeps lighting off when selected lighting level is present.

2.4 INDOOR OCCUPANCY SENSORS

- A. General Description: Wall- or ceiling-mounting, solid-state units.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

1. Operation: Unless otherwise indicated, turn lights on when covered area is occupied and off when unoccupied; with a time delay for turning lights off, adjustable over a minimum range of 1 to 15 minutes.
2. Mounting:
 - a. Sensor: Suitable for mounting in any position on a standard outlet box.
 - b. Time-Delay and Sensitivity Adjustments: Recessed and concealed behind hinged door.
3. Indicator: LED, to show when motion is being detected.
4. Bypass Switch: Override the on function in case of sensor failure.
5. Automatic Light-Level Sensor: Adjustable from 2 to 200 fc; keeps lighting off when selected lighting level is present.

B. Retain one or more of three paragraphs and associated subparagraphs below. Dual-Technology Type: Ceiling mounting; detect occupancy by using a combination of PIR and ultrasonic detection methods in area of coverage. Particular technology or combination of technologies that controls on and off functions shall be selectable in the field by operating controls on unit.

1. Sensitivity Adjustment: Separate for each sensing technology.
2. Detector Sensitivity: Detect occurrences of 6-inch minimum movement of any portion of a human body that presents a target of at least 36 sq. in., and detect a person of average size and weight moving at least 12 inches in either a horizontal or a vertical manner at an approximate speed of 12 inches/s.
3. Detection Coverage (Standard Room): Detect occupancy anywhere within a circular area of 1000 sq. ft. when mounted on a 96-inch- high ceiling.

2.5 CONDUCTORS AND CABLES

- A. Power Wiring to Supply Side of Remote-Control Power Sources: Not smaller than No. 12 AWG, complying with Division 16 Section "Basic Electrical Materials and Methods."
- B. Classes 2 and 3 Control Cable: Multiconductor cable with stranded copper conductors not smaller than No. 22 AWG, complying with Division 16 Section "Conductors and Cables."
- C. Class 1 Control Cable: Multiconductor cable with stranded copper conductors not smaller than No. 14 AWG, complying with Division 16 Section "Conductors and Cables."
- D. Install unshielded, twisted-pair cable for control and signal transmission conductors, complying with Division 16 Section "Voice and Data Communication Cabling."

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install and aim sensors in locations to achieve at least 90 percent coverage of areas indicated. Do not exceed coverage limits specified in manufacturer's written instructions.

- B. Wiring Method: Comply with Division 16 Section "Conductors and Cables." Minimum conduit size shall be 1/2 inch.
 - C. Install field-mounting transient voltage suppressors for lighting control devices in Category A locations that do not have integral line-voltage surge protection.
 - D. Label time switches and contactors with a unique designation.
 - E. Verify actuation of each sensor and adjust time delays.
- END OF SECTION 16145

SECTION 16442 - PANELBOARDS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals:
 - 1. Product data for panelboards and overcurrent protective devices.
- B. Comply with NEMA PB 1.
- C. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 MANUFACTURED UNITS

- A. Flush-mounted, NEMA PB 1, Type 1.
 - 1. Front: Secured to box with concealed trim clamps.
 - 2. Doors: With concealed hinges, flush catches, and tumbler locks, all keyed alike.
 - 3. Bus: Hard-drawn copper, 98 percent conductivity for each phase, neutral, and ground.
 - 4. Extra-Capacity Neutral Bus: Rated 200 percent of phase bus, and UL listed as suitable for nonlinear loads.
 - 5. Main and Neutral Lugs: Type suitable for use with conductor material.
 - 6. Extra-Capacity Neutral Lugs: Rated 200 percent of phase lugs.
 - 7. Equipment Ground Bus: Bonded to box.
 - 8. Feed-through Lugs: Type suitable for use with conductor material.
- B. Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in Division 16 Section "Seismic Controls for Electrical Work."
- C. Panelboard Short-Circuit Rating: UL label indicating series-connected rating with integral or remote upstream devices. Include size and type of upstream device allowable, branch devices allowable, and UL series-connected short-circuit rating.

2.2 LIGHTING AND APPLIANCE PANELBOARDS

- A. Branch Overcurrent Protective Devices: Plug-in circuit breakers.

2.3 DISTRIBUTION PANELBOARDS

- A. Doors: Omit in fused-switch panelboards.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

- B. Main Overcurrent Protective Devices: Circuit breaker.
- C. Branch overcurrent protective devices shall be one of the following:
 - 1. For Circuit-Breaker Frame Sizes 125 A and Smaller: Plug-in type.

2.4 LOAD CENTERS

- A. Overcurrent Protective Devices: Plug-in, full-module circuit breaker.

2.5 COMPONENTS

- A. Molded-Case Circuit Breaker: NEMA AB 1 thermal-magnetic type; UL 489 with series-connected rating to meet available fault currents.
 - 1. Appropriate for application; Type SWD for switching; Type HACR for heating, air-conditioning, and refrigerating equipment loads.
 - 2. GFCI Circuit Breakers: Single- and two-pole type with 5-mA trip sensitivity.
- B. Fused Switches: NEMA KS 1, Type HD, with rejection clips to accommodate indicated fuses; handle lockable.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install panelboards and accessory items according to NEMA PB 1.1. Indicate installed circuit loads on a typed circuit directory after balancing panelboard loads.
- B. Design each fastener and support to carry load indicated by seismic requirements and according to seismic-restraint details. See Division 16 Section "Basic Electrical Materials and Methods" for seismic-restraint requirements.
- C. Mount top of trim 74 inches above finished floor, unless otherwise indicated.
- D. Stub four empty 3/4-inch conduits from panelboard into accessible or designated ceiling space; stub four empty conduits into raised floor.
- E. Arrange conductors into groups; bundle and wrap with wire ties.

END OF SECTION 16442

SECTION 16500 - LIGHTING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data for each luminaire, including lamps.
- B. Fixtures, Emergency Lighting Units, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C. Coordinate ceiling-mounted luminaires with ceiling construction, mechanical work, and security and fire-prevention features mounted in ceiling space and on ceiling.

PART 2 - PRODUCTS

2.1 LUMINAIRES

- A. Fixture A: Surface Mounted Metal Halide
 - 1. Products:
 - a. Sylvania
 - b. Philips
 - c. GE
 - d. Approved Equal
 - 2. Voltage: 120-V ac.
 - 3. Mounting: Surface ceiling and Surface wall.
 - 4. Lamps: As Indicated on Drawings
 - 5. Lens: Acrylic Lens
 - 6. External Finish: Dark Bronze
 - 7. Trim and Hardware: Spring-loaded door latches.
 - 8. Other Features: UL Listed For Wet Conditions

2.2 HIGH-INTENSITY-DISCHARGE LAMP BALLASTS

- A. General: Comply with NEMA C82.4 and UL 1029. Include the following features, unless otherwise indicated.
 - 1. Type: Constant-wattage autotransformer or regulating high-power-factor type.
 - 2. Minimum Starting Temperature: Minus 22 deg F for single-lamp ballasts.
 - 3. Normal Ambient Operating Temperature: 104 deg F.
 - 4. Open-circuit operation that will not reduce average life.

ARCHITECTS +
June 13th, 2005

Observation Tower Replacement For Poverty Point State Historic Site

- B. Auxiliary, Instant-On, Quartz System: Automatically switches quartz lamp on when fixture is initially energized and when momentary power outages occur. Automatically turns quartz lamp off when high-intensity-discharge lamp reaches approximately 60 percent light output.
- C. Low-Noise Ballasts: Manufacturers' standard epoxy-encapsulated models designed to minimize audible fixture noise.

2.3 EXIT SIGNS

- A. General: Comply with UL 924; for sign colors and lettering size, comply with authorities having jurisdiction.
- B. Internally Lighted Signs:
 - 1. Lamps for AC Operation: Fluorescent, 2 for each fixture, 20,000 hours of rated lamp life.
 - 2. Lamps for AC Operation: Light emitting diodes, 70,000 hours minimum of rated lamp life.
 - 3. Additional Lamps for DC Operation: Two minimum, bayonet-base type, for connection to external dc source.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Set units level, plumb, and square with ceiling and walls, and secure.
- B. Support for Recessed and Semirecessed Grid-Type Fluorescent Fixtures:
 - 1. Install ceiling support system wires at a minimum of 4 wires for each fixture, located not more than 6 inches from fixture corners.
 - 2. Support Clips: Fasten to fixtures and to ceiling grid members at or near each fixture corner with clips that are UL listed for the application.
- C. Support for Suspended Fixtures: Brace pendants and rods over 48 inches long to limit swinging. Support stem-mounted, single-unit, suspended fluorescent fixtures with twin-stem hangers. For continuous rows, use tubing or stem for wiring at one point and tubing or rod for suspension for each unit length of chassis, including one at each end.
- D. Air-Handling Fixtures: Install with dampers closed.
- E. Lamping: Where specific lamp designations are not indicated, lamp units according to manufacturer's written instructions.

END OF SECTION 16500

BUILDING INFORMATION

LOCATION:
POVERTY POINT STATE HISTORIC SITE
LA HWY 517
EPPS, LOUISIANA 71237

SQUARE FOOTAGE (EXISTING):

FIRST FLOOR	590 S.F.
SECOND FLOOR	590 S.F.
TOTAL AREA	1180 S.F.

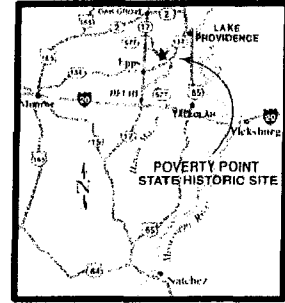
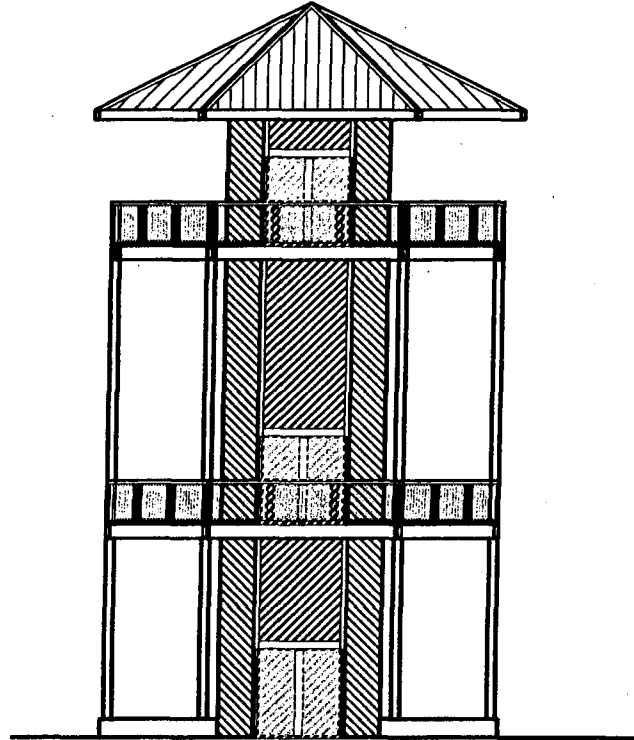
INTERNATIONAL BUILDING CODE 2003

OCCUPANCY:	SPECIAL USE - INDUSTRIAL
CONSTRUCTION TYPE:	III B UNPROTECTED UNSPRINKLED
HEIGHT LIMIT:	35'
MAX. STORES:	4
MAX. AREA 1 STORY:	15,000 SQ. FT.
MINIMUM OCCUPANT LOAD:	
BUSINESS:	1 / 100 GROSS SQ. FT.
STORAGE / MECH:	1 / 300 GROSS SQ. FT.
MAX. TRAVEL DISTANCE:	200 FT.
MAX. DEAD END CORRIDOR:	20 FT.
EGRESS WIDTH / PERSON:	
LEVEL:	0.2 INCHES
STAIRS:	0.37 INCHES
MIN. CORRIDOR WIDTH:	44 INCHES
MIN. CLEAR DPG:	32 INCHES
MIN. STAIR WIDTH:	44 INCHES
MIN. NUMBER OF EXITS:	1

LIFE SAFETY CODE 101, 2003 EDITION

OCCUPANCY:	SPECIAL STRUCTURE - TOWER
CONSTRUCTION TYPE:	NO SPECIAL REQUIREMENTS
CLASS. OF CONTENTS:	ORDINARY HAZARD
OCCUPANT LOAD:	
BUSINESS:	1 / 100 GROSS SQ. FT.
EXERCISE ROOMS:	1 / 50 GROSS SQ. FT.
CAPACITY OF EGRESS:	
STAIRS:	0.3 INCHES / PERSON
DOORS, RAMPS, HOR:	0.2 INCHES / PERSON
COMMON PATH LIMIT:	20 FT.
EXIT TRAVEL DISTANCE:	200 FEET
MAX. DEAD END CORRIDOR:	20 FT.
PROTECTION FROM HAZARDS:	
GENERAL STORAGE,	
BOILER OR FURNACE,	
JANITOR CLOSETS:	NA
INT. WALL AND CEILING FIN:	
ACCESS TO EXITS:	CLASS A OR B
ALL OTHER SPACES:	CLASS A-B, OR C
INT. FLOOR FINISH:	NO REQUIREMENTS
SPRINKLED:	NO
EMERGENCY LIGHTING:	NO
FIRE ALARM SYSTEM:	NO

OBSERVATION TOWER REPLACEMENT FOR POVERTY POINT STATE HISTORIC SITE EPPS, LOUISIANA



PROJECT LOCATION



DRAWING INDEX

ARCHITECTURAL

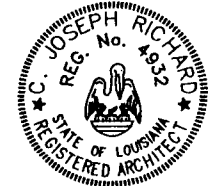
T1	BUILDING INFORMATION
T2	ADA INFORMATION
D1.1	DEMOLITION PLAN
A0.1	GROUND LEVEL PLAN
A1.1	FIRST FLOOR PLAN
A2.1	SECOND FLOOR PLAN
A3.1	ROOF PLAN / DETAILS
A4.1	ELEVATIONS
A5.1	DETAILS

STRUCTURAL

S1.0	FOUNDATION PLAN
S1.1	FOUNDATION DETAILS
S1.2	STRUCTURAL NOTES
S2.0	SECOND FLOOR FRAMING PLAN
S2.1	THIRD FLOOR FRAMING PLAN
S2.2	FRAMING PLAN
S2.3	ROOF FRAMING PLAN
S3.0	STRUCTURAL DETAILS
S3.1	STRUCTURAL DETAILS
S3.2	STRUCTURAL DETAILS

ELECTRICAL

E1.1	ELECTRICAL LIGHTING PLANS / SCHEDULE
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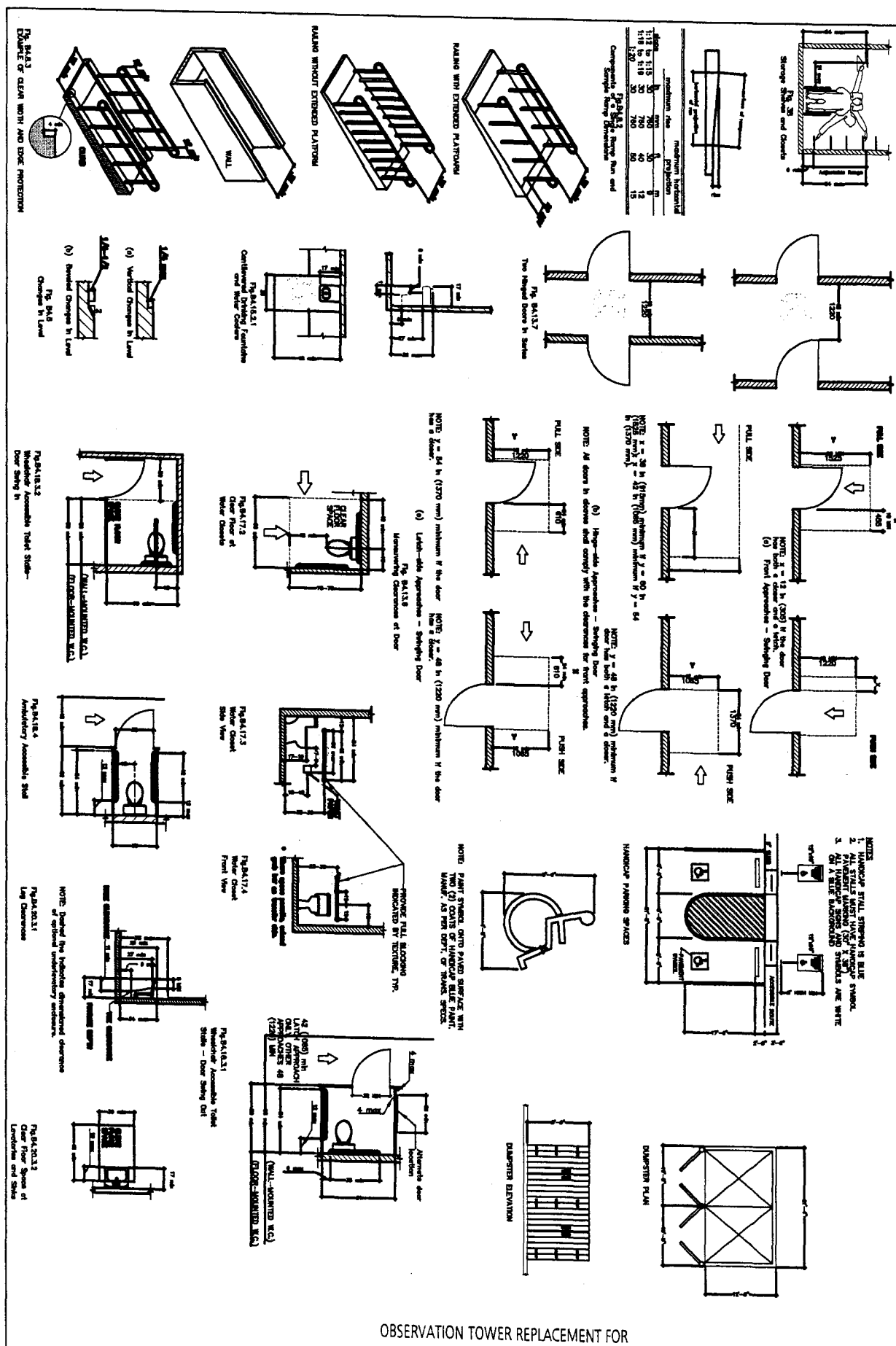
ARCHITECTS+
A LIMITED LIABILITY COMPANY
618-A MAIN STREET
BATON ROUGE, LA 70801
PHONE: (504) 374-1917
FAX: (504) 374-1922

OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE
EPPS, LOUISIANA

PROJECT NUMBER: 06-264-03-01-1B

Number: 04046.00
Date: 05/13/05

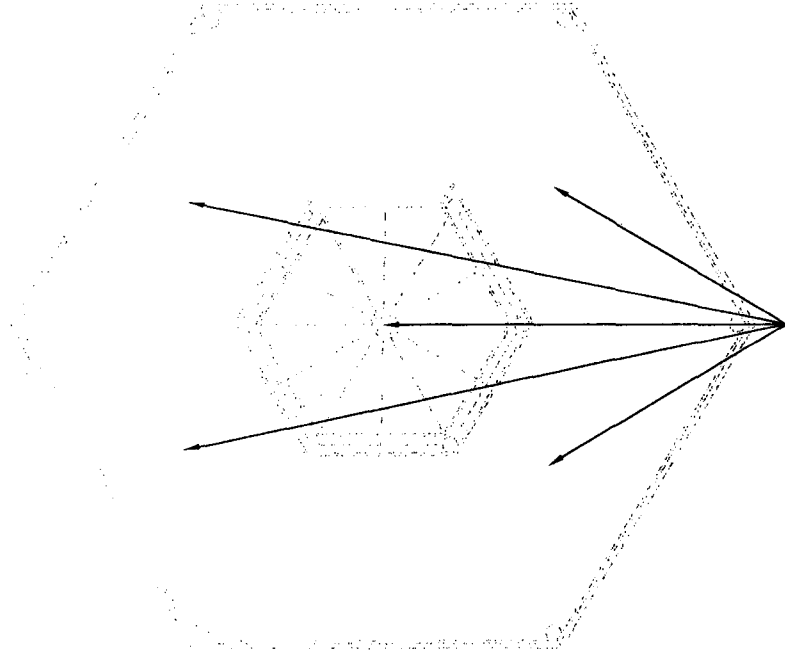
T1



OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE

EPPS, LOUISIANA
PROJECT NUMBER: 06-264-03-01-1B

ARCHITECTS +
A LIMITED LIABILITY COMPANY
616-A HARRY STREET
ANN ARBOR, MI 48106
PHONE: (734) 334-4444
FAX: (734) 334-1111



DEMOLITION PLAN
3/16" = 1'-0"

DEMOLITION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMITS REQUIRED BY LOCAL AUTHORITIES.
2. CONTRACTOR IS RESPONSIBLE FOR OBTAINING APPROVALS AND NOTIFICATIONS TO ALL LOCAL, STATE, AND FEDERAL AUTHORITIES.
3. SALVAGE RIGHTS TO DEMOLISHED ITEMS SHALL FIRST BE GIVEN TO THE OWNER OTHERWISE SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE PROPERLY DISPOSED OF.
4. ALL MATERIALS THAT ARE NOT TO BE SALVAGED AND REUSED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR SHALL PROVIDE NECESSARY CLEARANCE AND PROTECT SURROUNDING SITE DURING DEMOLITION. AREAS DAMAGED BY DEMOLITION SHALL BE RESTORED TO ORIGINAL CONDITION BY CONTRACTOR.
6. CONTRACTOR SHALL PROVIDE SAFETY BARRICADES DURING DEMOLITION.
7. CONTRACTOR IS RESPONSIBLE FOR VERIFYING/LOCATING EXISTING UTILITIES AND DISCONNECTING PRIOR TO DEMOLITION.
8. CONTRACTOR SHALL LOCATE EXISTING ELECTRICAL FEED FOR USE IN CONSTRUCTION OF NEW TOWER.
9. CONTRACTOR SHALL CUT EXISTING PILES AT GRADE TO TEST BEARING CAPACITY OF PILES. IF PILES MEET OR EXCEEDS PROJECT REQUIREMENTS THE CONTRACTOR SHALL USE EXISTING PILES (DEDUCT ALTERNATE #1) RE: STRUCTURAL.

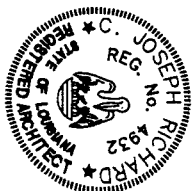
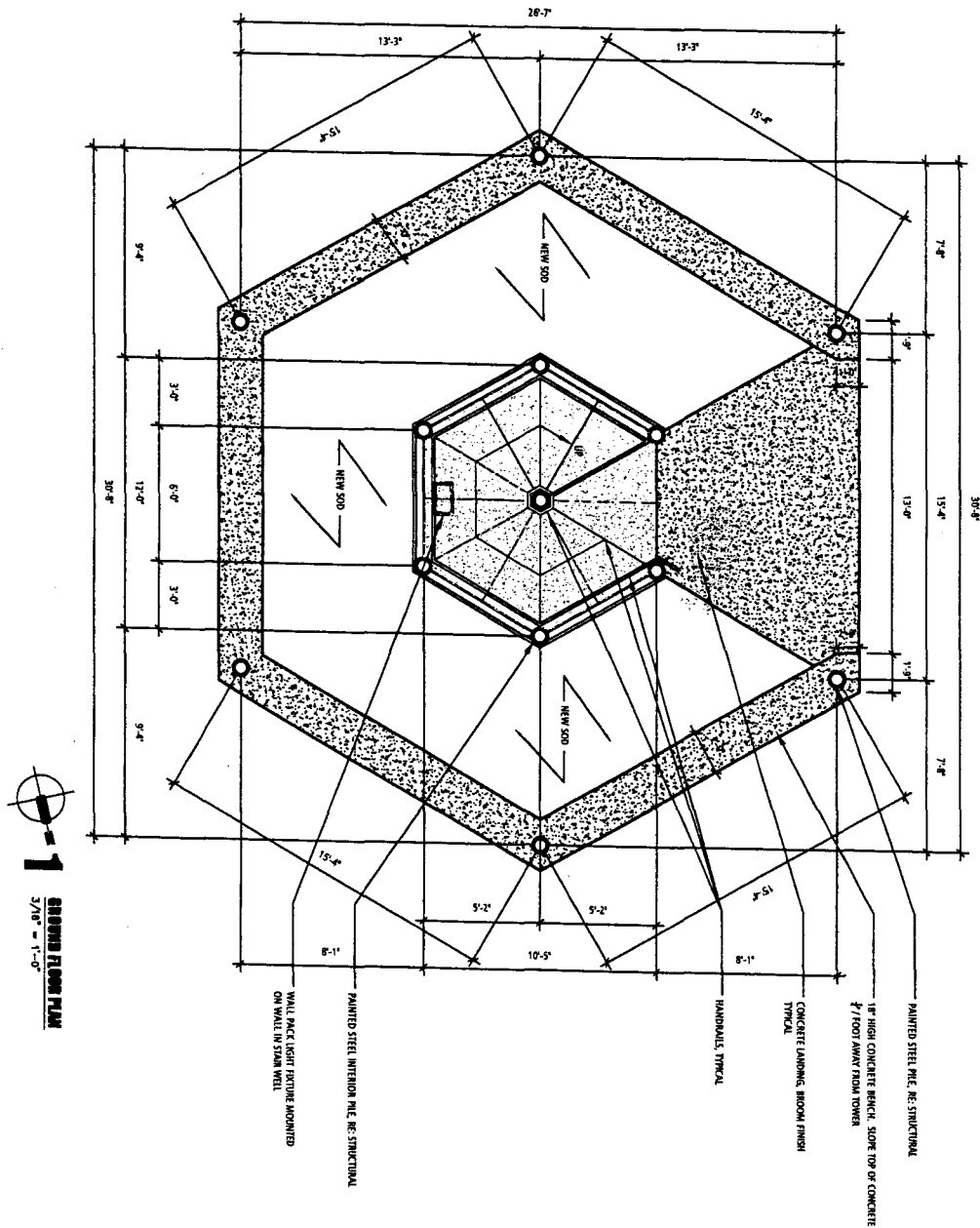


OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE
EPPS, LOUISIANA

PROJECT NUMBER: 06-264-03-01-1B

D1.1
DEMOLITION PLAN

Number: 06-264-03-01-1B Date: 05/13/05



A0.1

Number: 04046.00 Date: 05/13/05

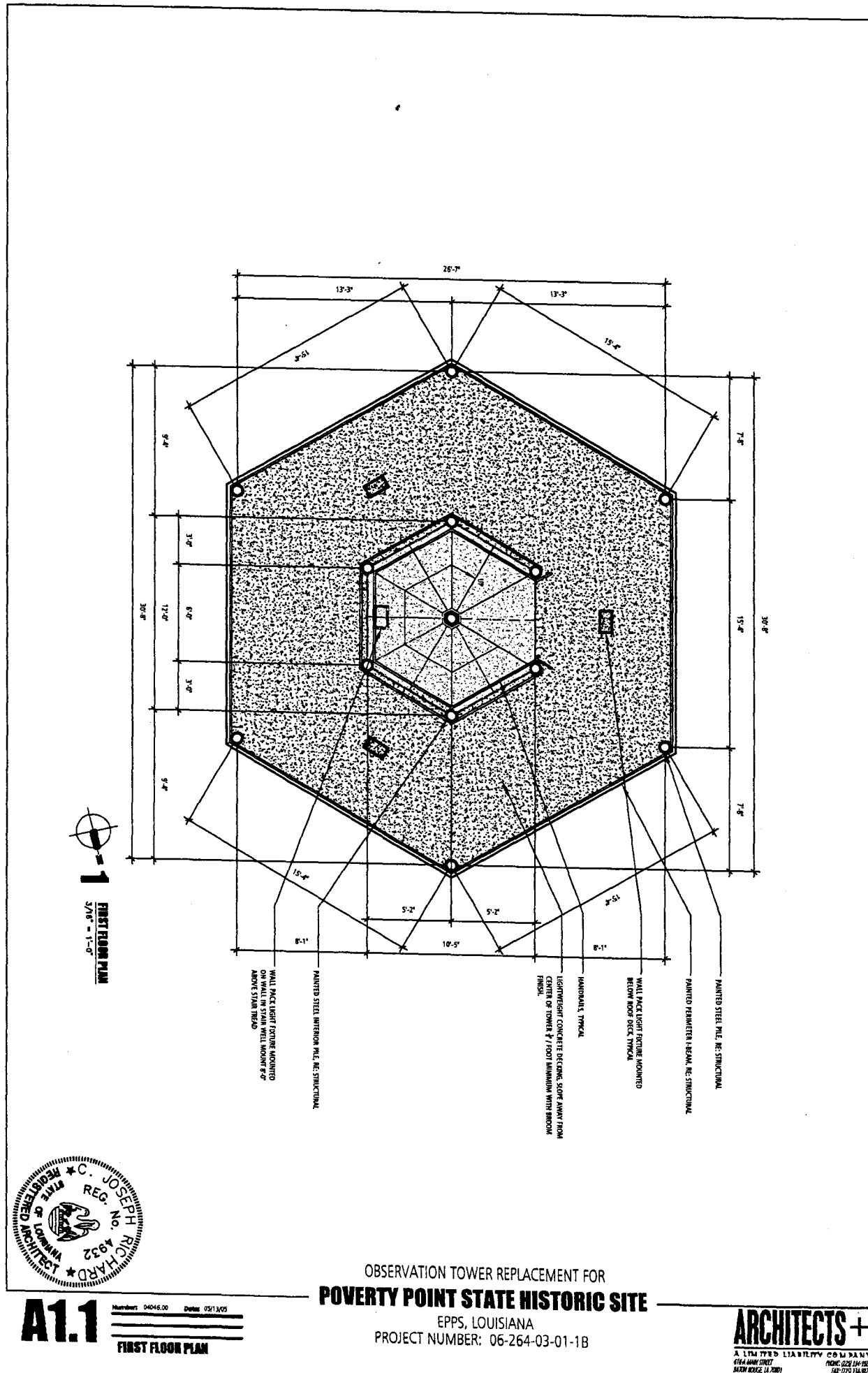
GROUND FLOOR PLAN

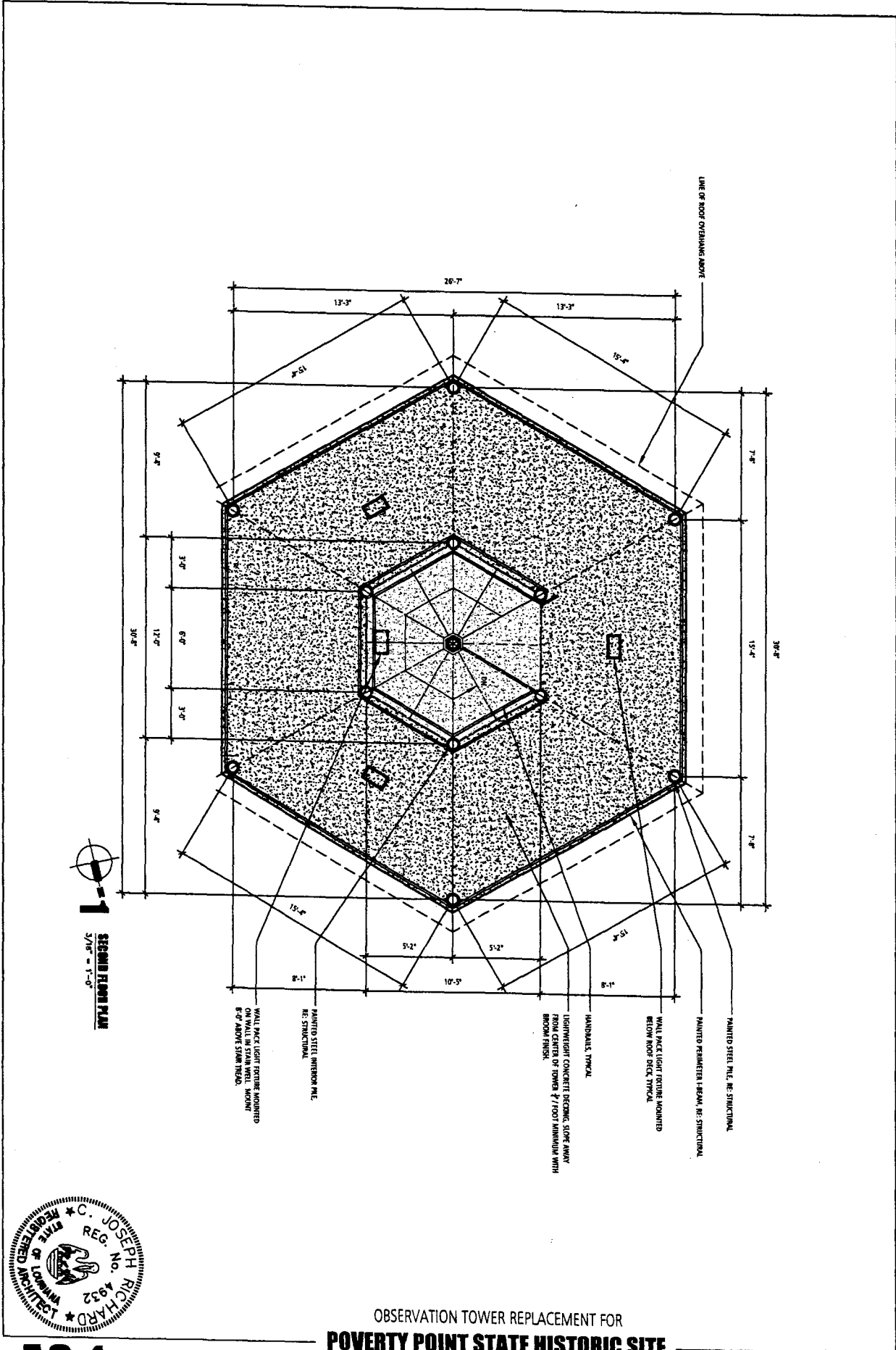
OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE

EPPS, LOUISIANA
PROJECT NUMBER: 06-264-03-01-1B

ARCHITECTS+

A LIMITED LIABILITY COMPANY
6784 JAW STREET
DARTMOUTH, LA 70047
PHONE: (225) 244-1922
FAX: (225) 244-1922

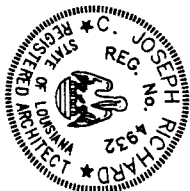
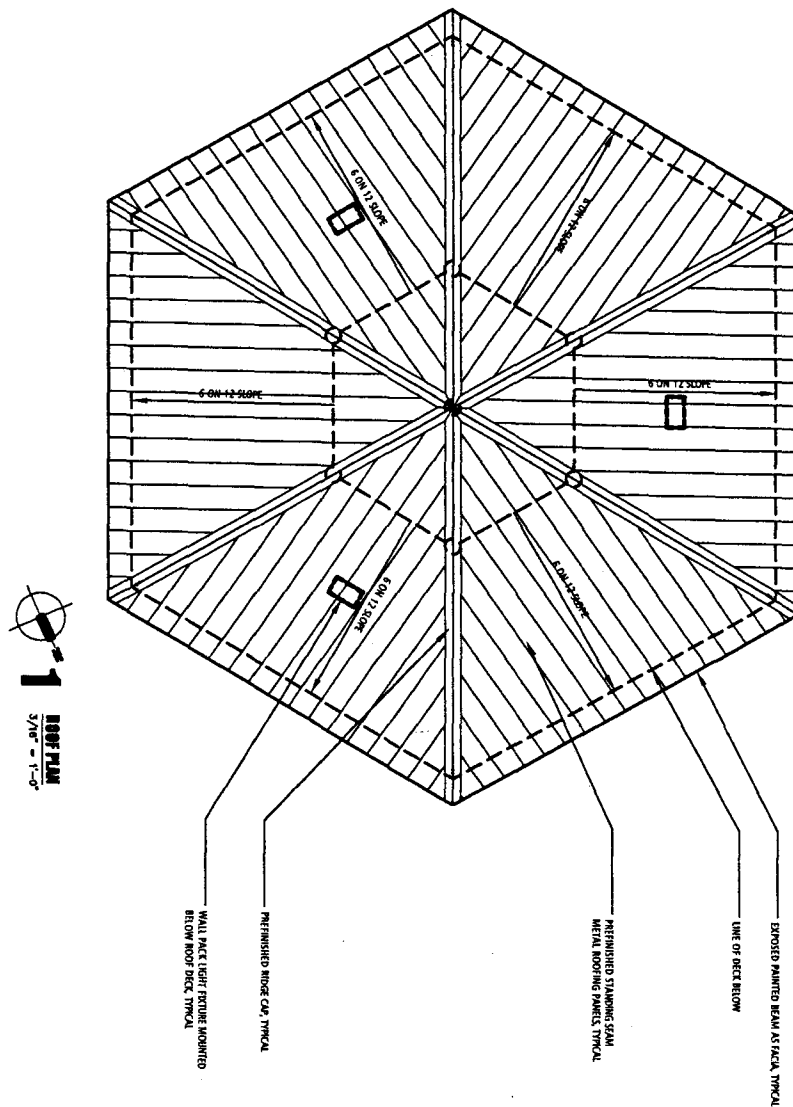




A2.1
SECOND FLOOR PLAN

OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE
EPPS, LOUISIANA
PROJECT NUMBER: 06-264-03-01-1B

ARCHITECTS+
A LIMITED LIABILITY COMPANY
604 MAIN STREET
BAYTOWN, LA 70615
PHONE: (504) 835-1111
FAX: (504) 835-1111



A3.1

Number: 04046.00 Date: 05/13/05

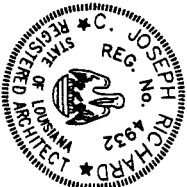
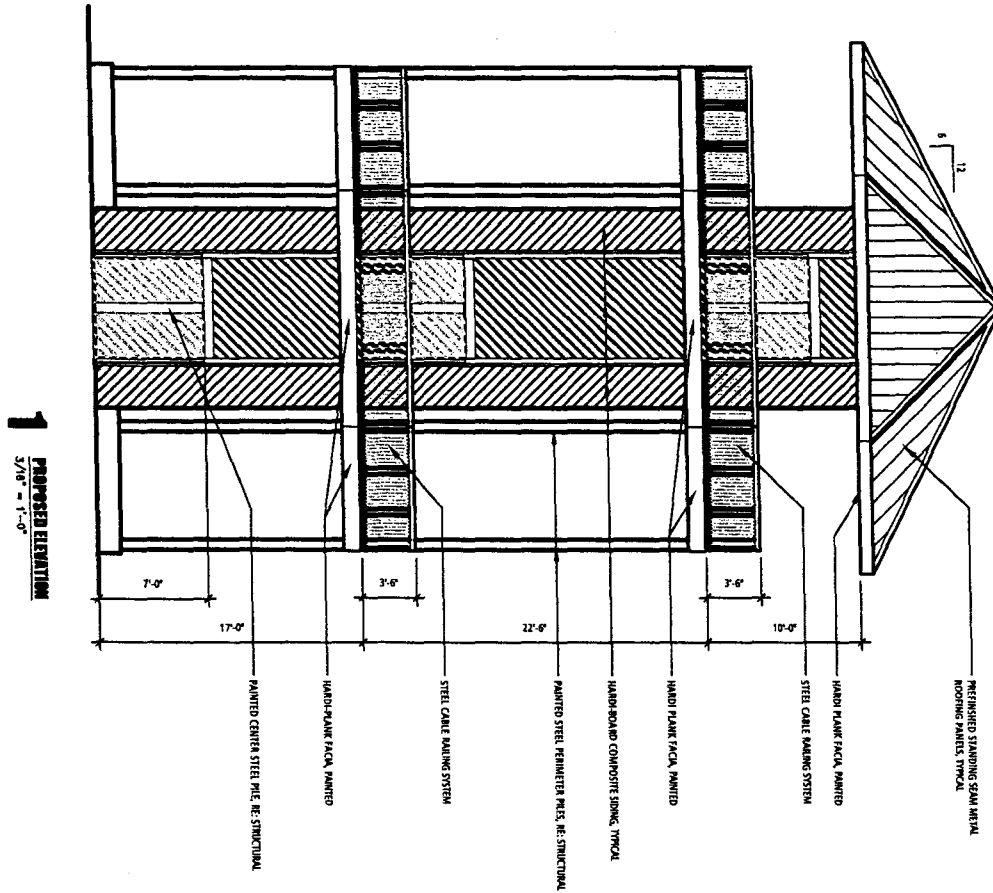
ROOF PLAN

OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE

EPPS, LOUISIANA
 PROJECT NUMBER: 06-264-03-01-1B

ARCHITECTS+

A LIMITED LIABILITY COMPANY
 5104 MAIN STREET
 BOSTON, MASSACHUSETTS 02111
 PHONE: (617) 554-1000
 FAX: (617) 554-1001



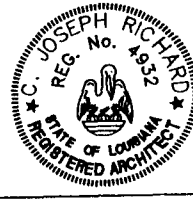
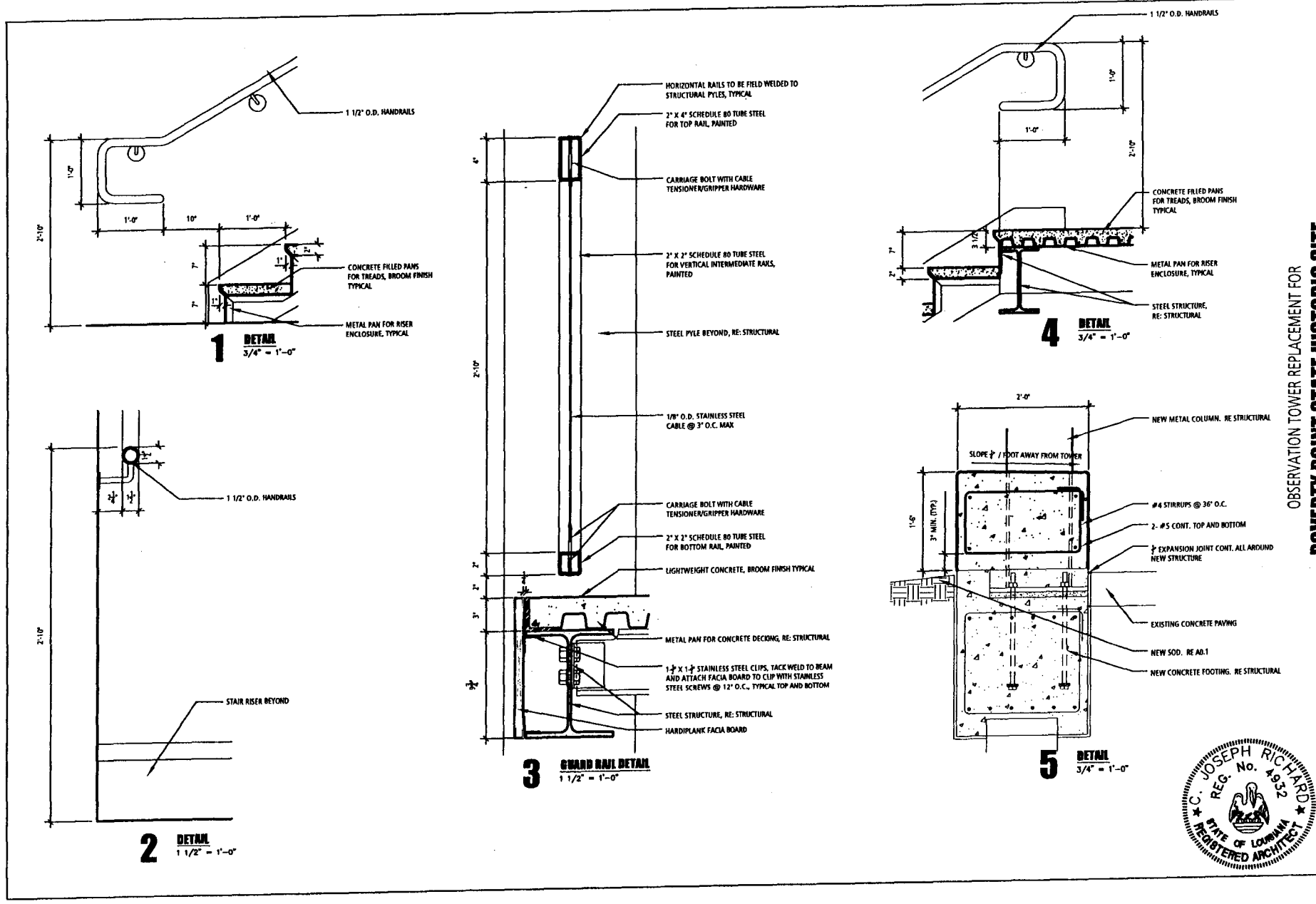
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Number: 04046.00 Date: 05/13/05
PROPOSER ELEVATION

OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE

EPPS, LOUISIANA
PROJECT NUMBER: 06-264-03-01-1B

ARCHITECTS+
A LIMITED LIABILITY COMPANY
1304 JAMES STREET
BAYOU BOULE, LA 70001
PHONE: (504) 334-1922
FAX: (504) 334-1923

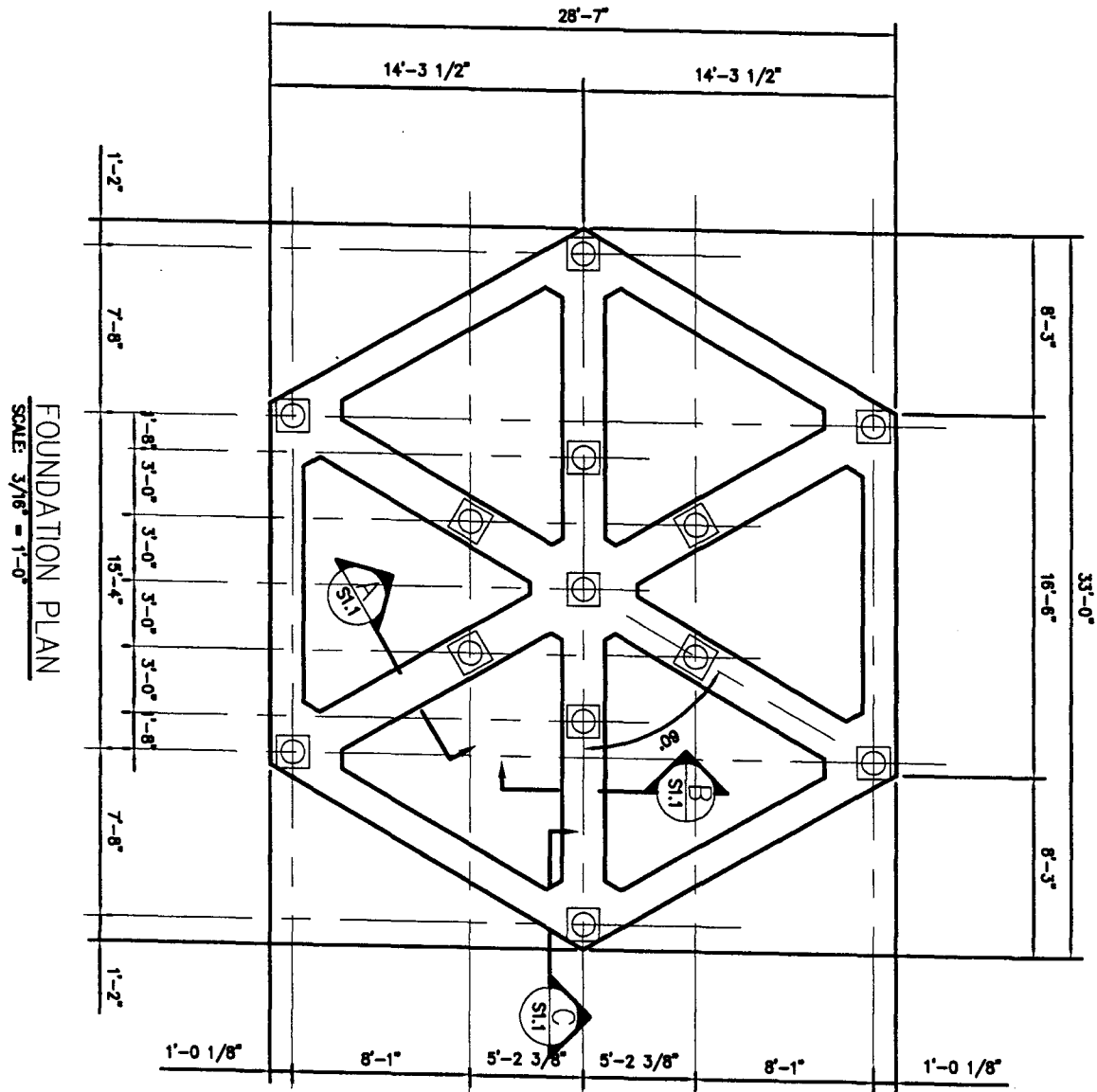


OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE
 EPPS, LOUISIANA

PROJECT NUMBER: 06-264-03-01-1B

ARCHITECTS +
 A LIMITED LIABILITY COMPANY
 514 N. HUNTER STREET
 METairie, LA 70002
 (504) 885-1400

A5.1
 Details
 Number: 06-264-03-01-1B Date: 05/13/05



Project: 22028-085
 1018 Central Avenue Metairie, LA 70001
 Ph: (504)998-1490 Fax: (504)998-1491

S1.0

Number: 04046.00 Date: 05/4/05

FOUNDATION PLAN

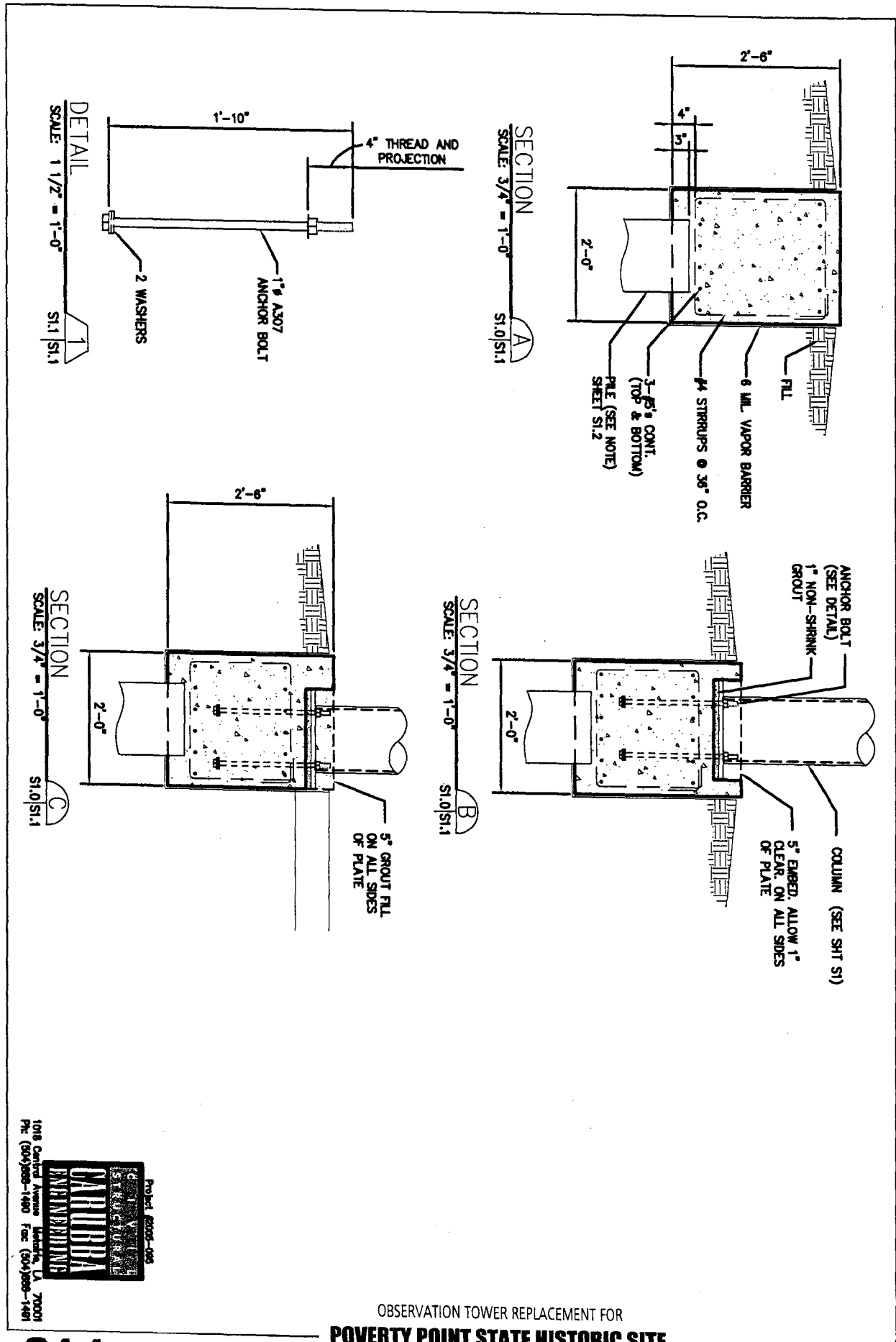
OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE

EPPS, LOUISIANA

PROJECT NUMBER: DCRT-OSP-05-12, CFMS NO: 620979

ARCHITECTS +

A LIMITED LIABILITY COMPANY
 1018 CENTRAL AVENUE METairie, LA 70001
 (504) 998-1490 FAX (504) 998-1491



1018 Central Avenue Metairie, LA 70001
PH: (504) 885-1480 FAX: (504) 885-1481



S1.1

Number: 04046.00 Date: 05/4/05
SECTIONS & DETAILS

OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE
EPPS, LOUISIANA
PROJECT NUMBER: DCRT-OSP-05-12, CFMS NO: 620979

ARCHITECTS +
A LIMITED LIABILITY COMPANY
1018 Central Avenue Metairie, LA 70001
PH: (504) 885-1480 FAX: (504) 885-1481

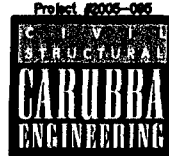
NOTES

GENERAL

1. BEAM DIMENSIONS SHOWN ARE MINIMUM REQUIRED AND MAY NOT BE REDUCED, NOR ENLARGED WITHOUT APPROVAL OF THE ENGINEER.
2. DISCONTINUE GRADE BEAM REINFORCING @ COLUMN PEDESTAL LOCATIONS.
3. THE CONCRETE DESIGN IS BASED UPON CONCRETE MIX YIELDING MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. CONCRETE DESIGN MIX SHALL BE IN ACCORDANCE WITH ACI-318 (LATEST VERSION). NO CHLORIDES SHALL BE ALLOWED.
4. LAPS, SPLICES, TIES, AND EMBEDMENT LENGTHS FOR REINFORCING STEEL SHALL BE IN ACCORDANCE WITH A.C.I. "MANUAL OF STANDARD PRACTICE, DETAILS, AND DETAILING OF CONCRETE REINFORCEMENT", A.C.I. 318, A.C.I. 315, AND IN ACCORDANCE WITH C.R.S.I. STANDARDS. ALL CONCRETE WORK SHALL BE IN STRICT ACCORDANCE WITH A.C.I. STANDARD SPECIFICATION FOR CONCRETE AND REINFORCED CONCRETE. ALL CONCRETE PLACEMENT SHALL CONFORM TO A.C.I. 301 AND A.C.I. 318.
5. COMPRESSION EMBEDMENT LENGTH SHALL BE 30 BAR DIAMETERS UNLESS NOTED OTHERWISE.
6. CLEAR DISTANCE BETWEEN ADJACENT LAYERS OF REINFORCEMENT SHALL BE 2 INCHES MINIMUM UNLESS NOTED OTHERWISE.
7. THE CONTRACTOR SHALL BE ALLOWED TO MAKE SPLICES IN ADDITION TO THOSE INDICATED ON THE DRAWINGS WHERE ESSENTIAL TO CONSTRUCTABILITY, SUBJECT TO ENGINEER'S APPROVAL.
8. SUBJECT TO ENGINEER'S APPROVAL, BARS MAY BE SHIFTED SLIGHTLY IN THE FIELD WHERE NECESSARY TO AVOID OPENINGS, PIPES, EMBEDDED ITEMS, OR OTHER OBSTRUCTIONS.
9. HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH ACI 318.
10. PLACEMENT, CLEARANCES, AND MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE PROVIDED IN ACCORDANCE WITH A.C.I. 318.
11. SEE ARCHITECTURAL DRAWINGS FOR TOP OF SLAB ELEVATIONS, SLOPES, RECESSES, LEDGES, AND STEPS.
12. BOTTOMS OF ALL EXCAVATIONS AND EARTHEN FORMS SHALL BE FLAT, LEVEL, TRUE TO GRADE AND LINE, AND COMPLETELY FREE OF LOOSE DIRT, DEBRIS, AND SLUSH. DAMPEN EARTH AGAINST WHICH CONCRETE IS POURED JUST PRIOR TO THE POUR, BUT DO NOT POUR INTO TRENCHES WITH STANDING WATER.
13. FORMS FOR EXPOSED FINISH CONCRETE: PLYWOOD, METAL, METAL-FRAMED PLYWOOD FACED, OR OTHER ACCEPTABLE PANEL-TYPE MATERIALS TO PROVIDE CONTINUOUS, STRAIGHT, SMOOTH, EXPOSED SURFACES.
14. ALL REINFORCING STEEL SHALL BE GRADE 60 BAR CONFORMING TO THE LATEST EDITION OF ASTM.
15. ALL EXTERIOR BRICK AND OR MASONRY WALLS TO HAVE EXPANSION AND CONTRACTION JOINTS. REFER TO ARCHITECTURAL DETAILS FOR LOCATIONS AND INFORMATION REGARDING SPACING, TYPE, LOCATION, INSTALLATION, AND MAINTENANCE. BRICK FLASHING AREAS MUST BE EXTENDED COMPLETELY TO THE EDGE OF THE CONCRETE IN ALL DIRECTIONS TO PREVENT BONDING TO THE FOUNDATION.

PILES

1. ALT #1: USE EXISTING PILES ONCE TESTING OF EXISTING PILES IS COMPLETED. CONTRACTOR MAY USE EXISTING PILES ONLY IF CAPACITY OF EXISTING PILES MEETS OR EXCEEDS PROJECT REQUIREMENTS.
2. (IF PILE TESTING IS NOT CONDUCTED OR PILES DO NOT MEET PROJECT REQUIREMENTS): ASTM D25 TREATED PILE, 45' LONG - DRIVEN TO REFUSAL (25 BLOWS PER FOOT FOR TWO CONSECUTIVE FEET USING A 15,000 FT. LB. DROP HAMMER.)
13" BUTT, 7" TIP,
20 TON DESIGN LOAD
3. (IF PILE TESTING IS NOT CONDUCTED OR PILES DO NOT MEET PROJECT REQUIREMENTS): ALTERNATE PILE; 16" Ø AUGERED CAST-IN-PLACE PILE 35' LONG 20 TON DESIGN LOAD



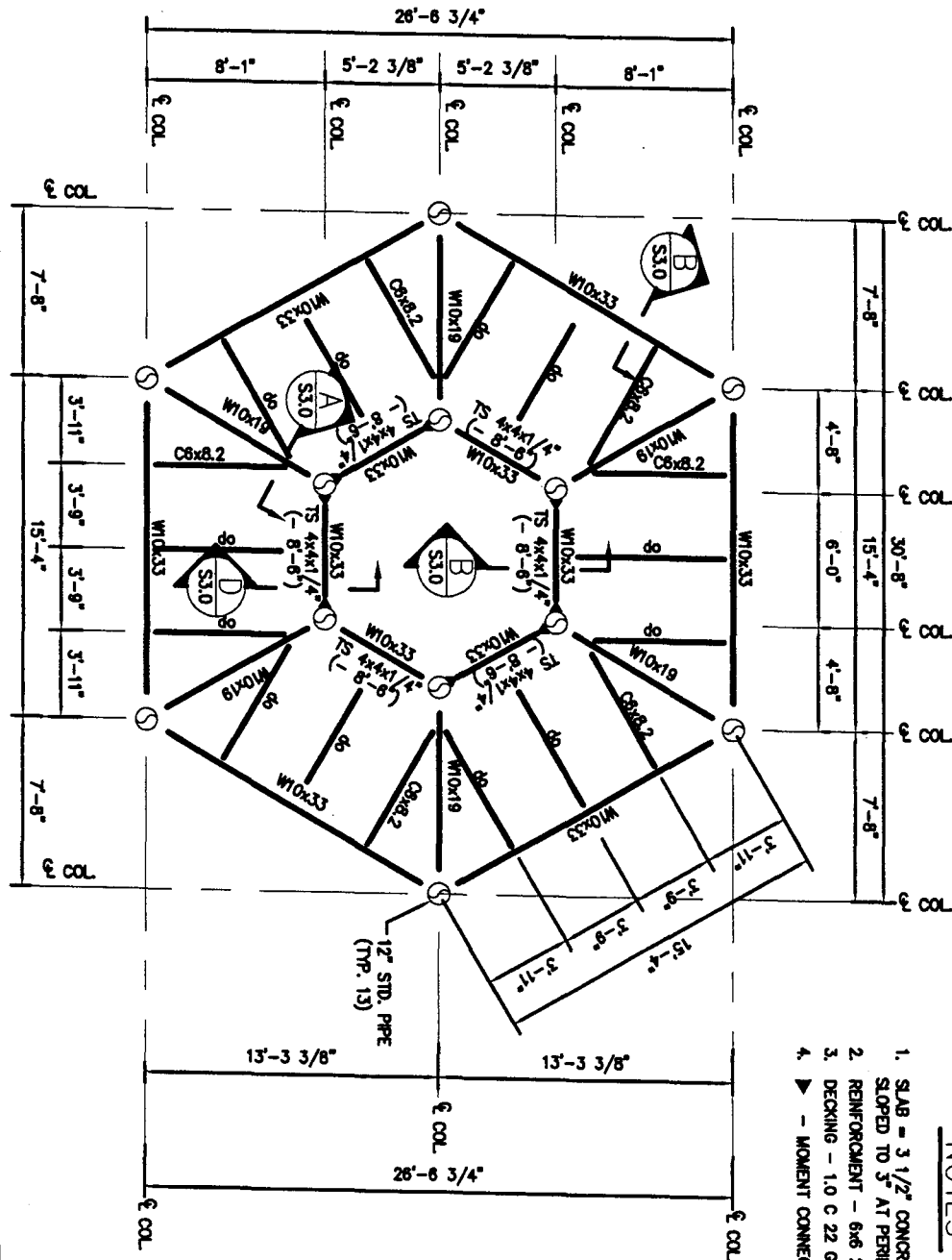
1018 Central Avenue Metairie, LA 70001
Ph: (504)888-1490 Fax: (504)888-1491

OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE
EPPS, LOUISIANA
PROJECT NUMBER: DCRT-OSP-05-12, CFMS NO: 620979

\$1.2
 FOUNDATION PLAN
 Date: 05/05/05
 Drawn: 04/06/03

ARCHITECTS +
 A LIMITED LIABILITY COMPANY
 1018 Central Avenue Metairie, LA 70001
 Ph: (504)888-1490 Fax: (504)888-1491

FRAMING PLAN T.O. STEEL 16'-10 1/2"
SCALE: 3/16" = 1'-0"



NOTES

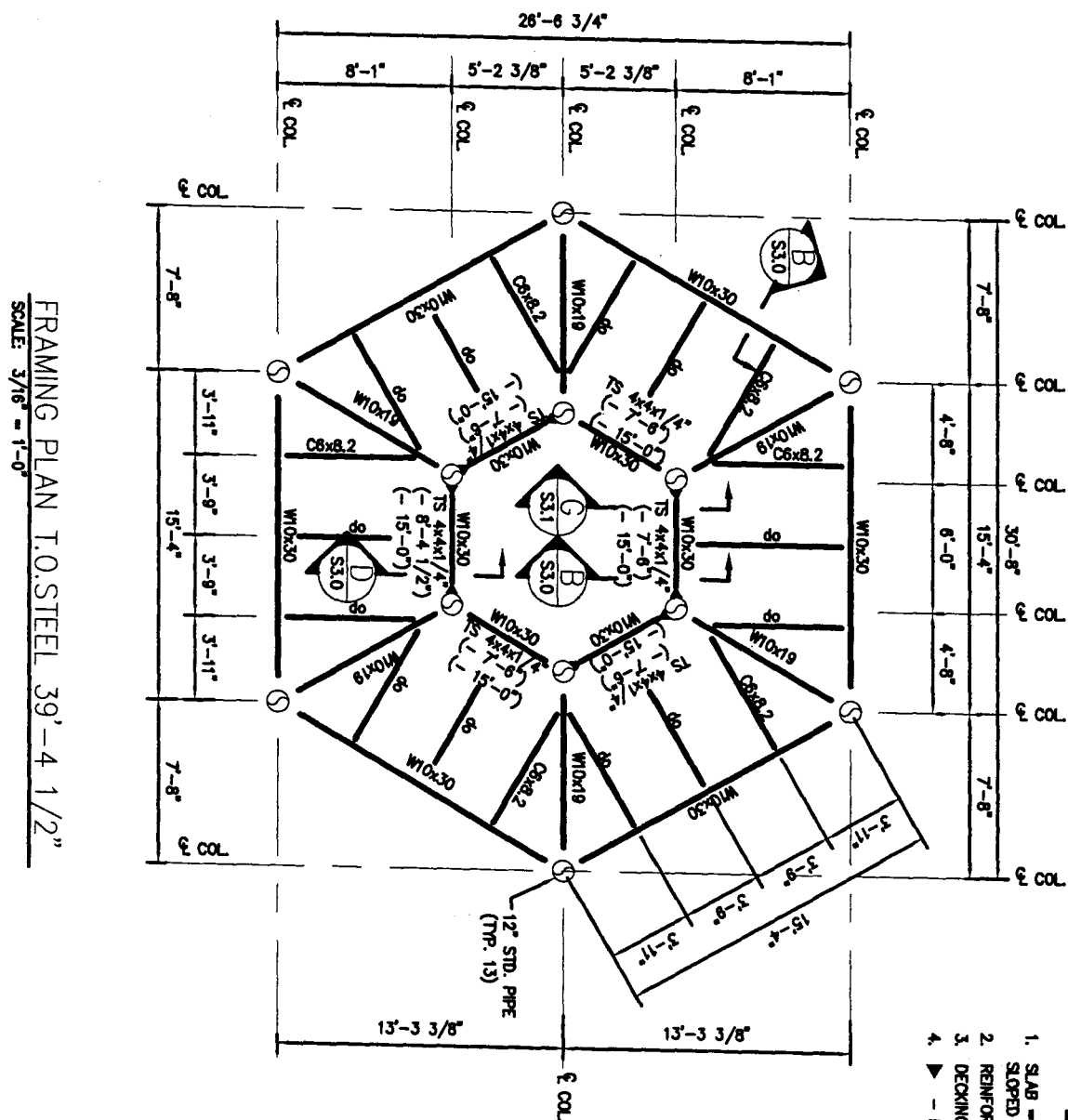
1. SLAB = 3 1/2" CONCRETE SLOPED TO 3" AT PERIMETER.
2. REINFORCEMENT - 6x6 2.9/2.9 WWF
3. DECKING - 1.0 C 22 GA.
4. ▲ - MOMENT CONNECTION

Project 62097-065
1018 Central Avenue Metairie, LA 70001
Ph: (504)588-1400 Fax: (504)588-1491

S2.0
SECOND FLOOR PLAN

OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE
EPPS, LOUISIANA
PROJECT NUMBER: DCRT-OSP-05-12, CFMS NO: 620979

ARCHITECTS +
A LIMITED LIABILITY COMPANY
1018 CENTRAL AVENUE METAIRIE, LA 70001
PH: (504) 588-1400 FAX: (504) 588-1491



FRAMING PLAN T.O. STEEL 39'-4 1/2"

SCALE: 3/16" = 1'-0"

NOTES

1. SLAB = 3 1/2" CONCRETE SLOPED TO 3" AT PERIMETER.
2. REINFORCEMENT - 6x6 2.9/2.9 WNF
3. DECKING - 1.0 C 22 GA.
4. ◀ - MOMENT CONNECTION

Project #2006-006

CALIBRA

ENGINEERING

1018 Central Avenue Metairie, LA 70001

Ph: (504) 885-1400 Fax: (504) 885-1491

S2.1

Number: 04046.00 Date: 05/4/05

THIRD FLOOR PLAN

OBSERVATION TOWER REPLACEMENT FOR

POVERTY POINT STATE HISTORIC SITE

EPPS, LOUISIANA

PROJECT NUMBER: DCRT-OSP-05-12, CFMS NO: 620979

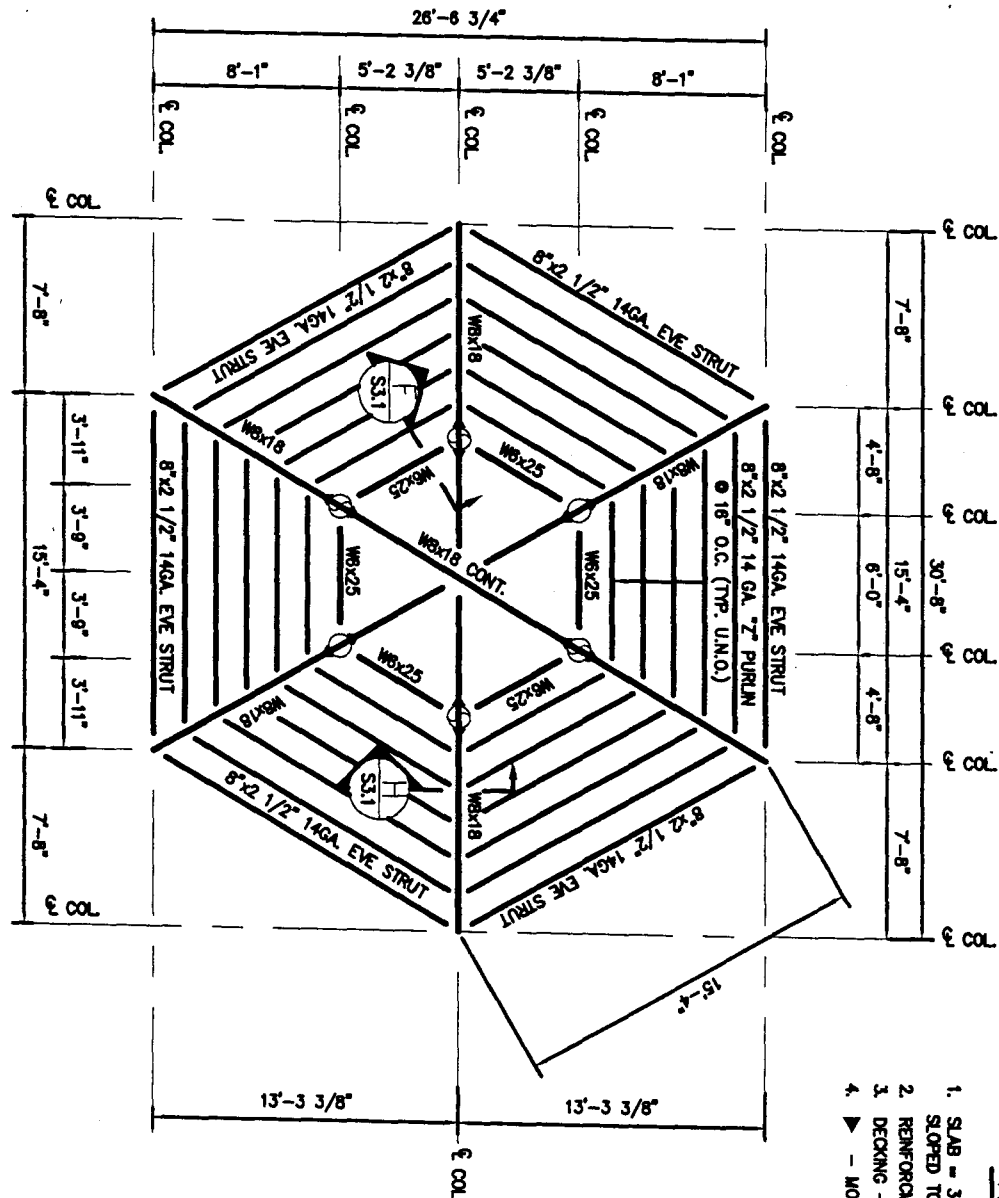
ARCHITECTS +

A LIMITED LIABILITY COMPANY

ONE PONTCHARTRAVE AVENUE SUITE 200 METairie, LA 70001

PH: (504) 885-1400 FAX: (504) 885-1491

FRAMING PLAN T.O. STEEL 49'-4 1/2"
SCALE: 3/16" = 1'-0"



NOTES

1. SLAB = 3 1/2" CONCRETE SLOPED TO 3" AT PERIMETER.
2. REINFORCEMENT - 8x8 2.9/2.9 WWF
3. DECKING - 1.0 C 22 GA.
4. ▲ - MOMENT CONNECTION

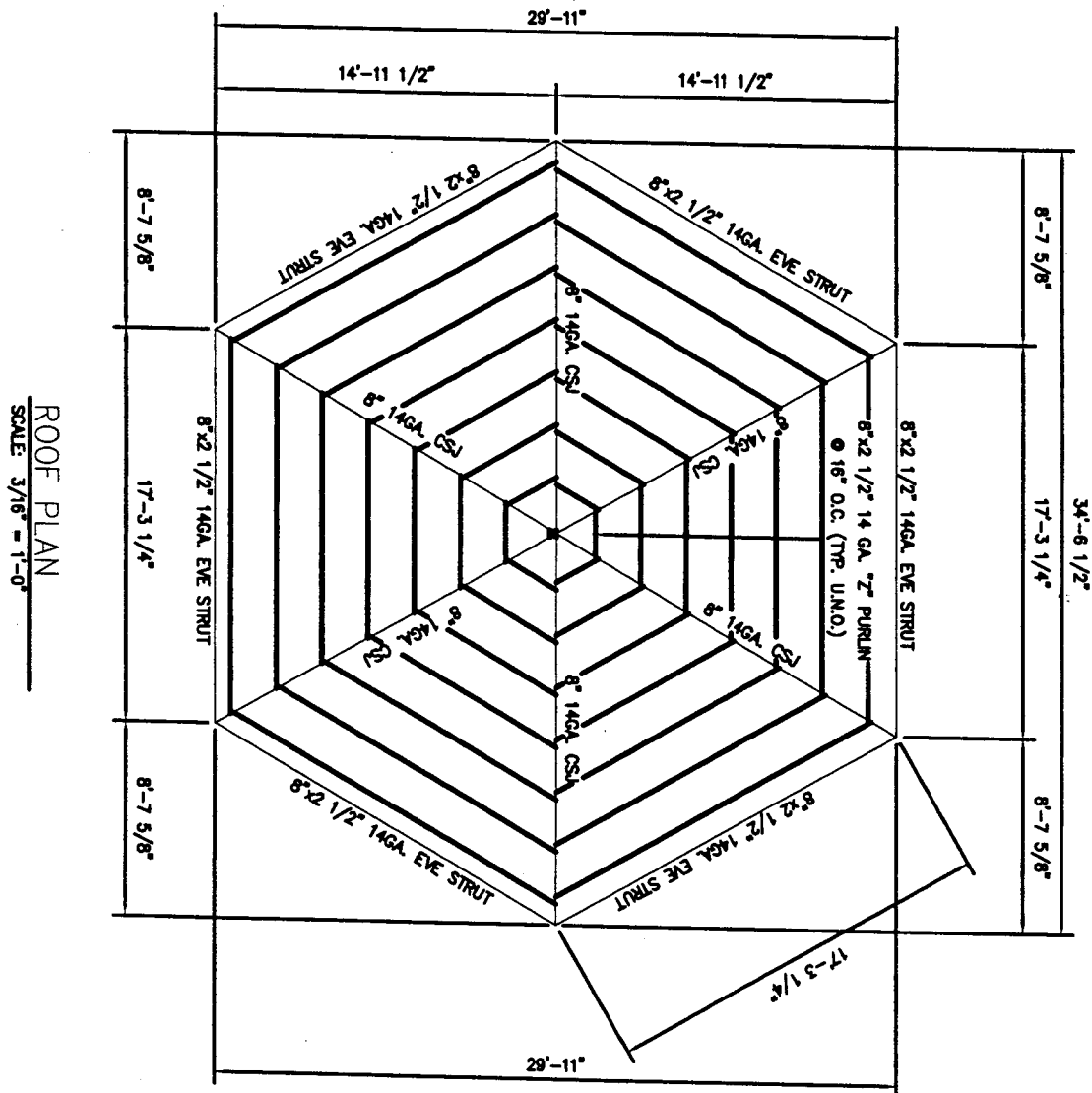
1016 Central Avenue Metairie, LA 70001
Ph: (504)885-1400 Fax: (504)885-1401



S2.2 Member: 04046.00 Dated: 05/05
FRAMING PLAN

OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE
EPPS, LOUISIANA
PROJECT NUMBER: DCRT-OSP-05-12, CFMS NO: 620979

ARCHITECTS +
A LIMITED LIABILITY COMPANY
1016 Central Avenue Metairie, LA 70001
Ph: (504)885-1400 Fax: (504)885-1401



1016 Central Avenue
Metairie, LA 70001
Ph: (504)885-1400 Fax: (504)885-1401



S2.3

Member: 04046.00 Date: 03/4/05
ROOF PLAN

OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE
EPPS, LOUISIANA
PROJECT NUMBER: DCRT-OSP-05-12, CFMS NO: 620979

ARCHITECTS +
A LIMITED LIABILITY COMPANY
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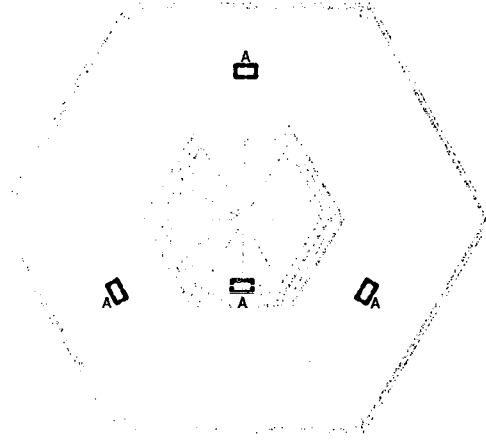
FIXTURE SCHEDULE	
TYPE	DESCRIPTION
A	U.L. RATED METAL HALIDE, 100W, WALL PACK, BLACK FINISH, 120V

ELECTRICAL GENERAL NOTES

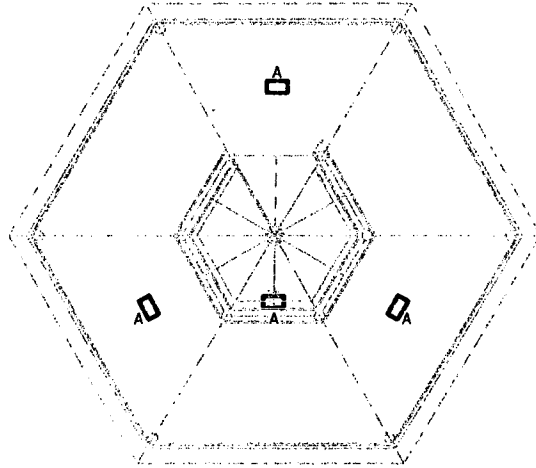
CONTRACTOR SHALL USE EXISTING ELECTRICAL FEED FOR LIGHTING IN NEW TOWER.

ALL NEW WIRING SHALL BE INSTALLED IN RIGID CONDUIT. NO FLEX CONDUIT SHALL BE USED.

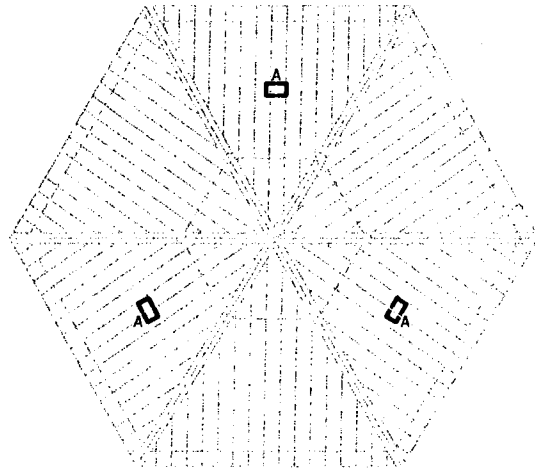
PROVIDE PHOTO CELL ON CIRCUIT FOR NEW LIGHTING WITH A MANUAL SWITCH OVERRIDE.



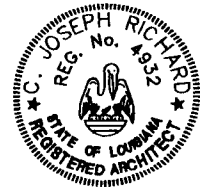
1 FIRST FLOOR LIGHTING PLAN
1/8" = 1'-0"



2 SECOND FLOOR LIGHTING PLAN
1/8" = 1'-0"



3 THIRD FLOOR LIGHTING PLAN
1/8" = 1'-0"

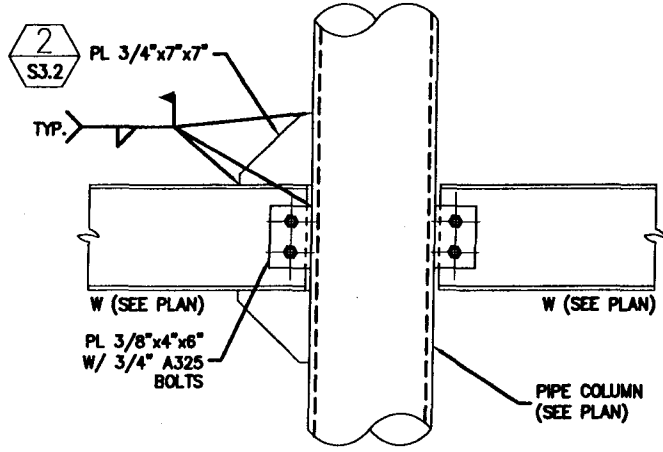


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POVERTY POINT STATE HISTORIC SITE
EPPS, LOUISIANA

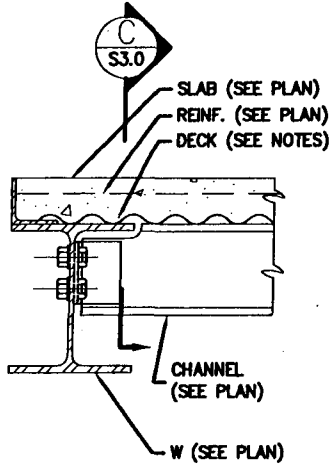
PROJECT NUMBER: 06-264-03-01-1B

Number: 06-06-00 Date: 05/13/05
E1.1
ELECTRICAL LIGHTING

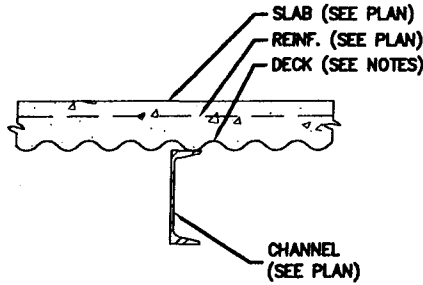
ARCHITECTS +
A LIMITED LIABILITY COMPANY
614 JAMES STREET
BIRMINGHAM, AL 35202
205.252.1240



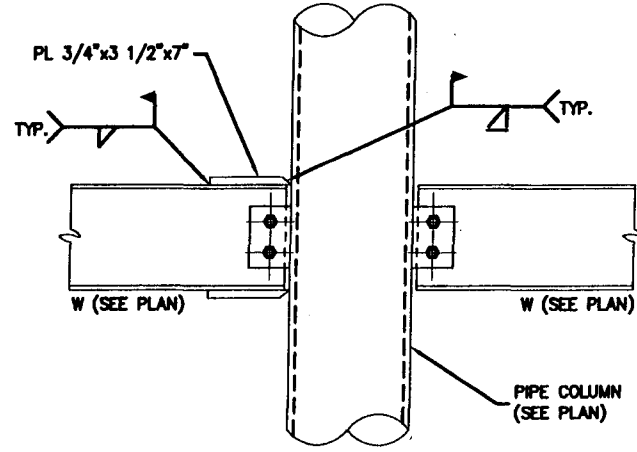
SECTION A
SCALE: 1" = 1'-0" S2.0/S3.0



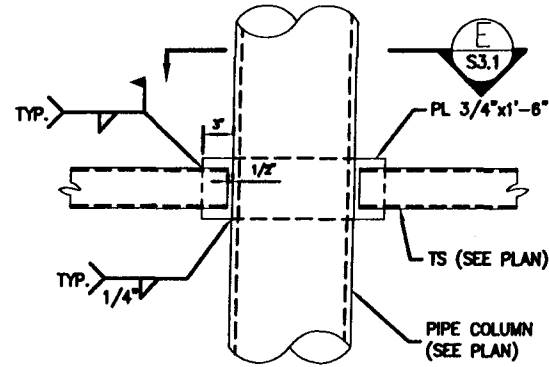
SECTION B
SCALE: 1 1/2" = 1'-0" S2.0/S3.0



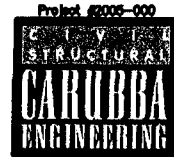
SECTION C
SCALE: 1 1/2" = 1'-0" S2.0/S3.0



(ALTERNATE MOMENT CONNECTION)
SECTION D
SCALE: 1" = 1'-0" S2.0/S3.0



SECTION E
SCALE: 1" = 1'-0" S2.0/S3.0

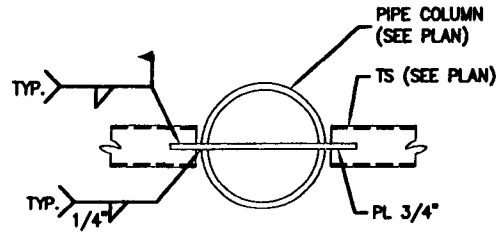


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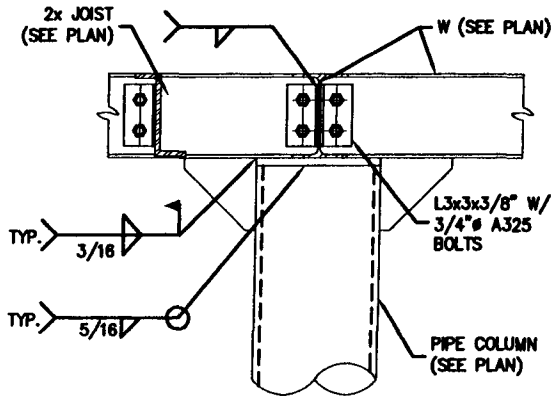
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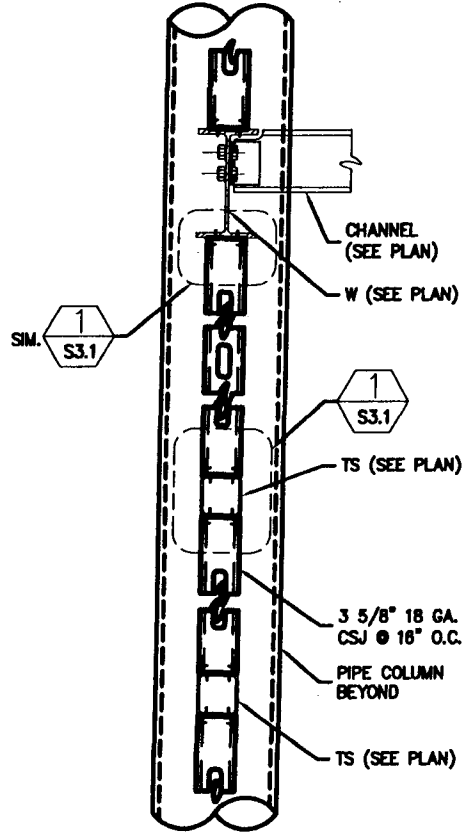
S3.0
SECTIONS & DETAILS
Project 42005-000
Date: 03/05/05
Sheet: 04/04/05



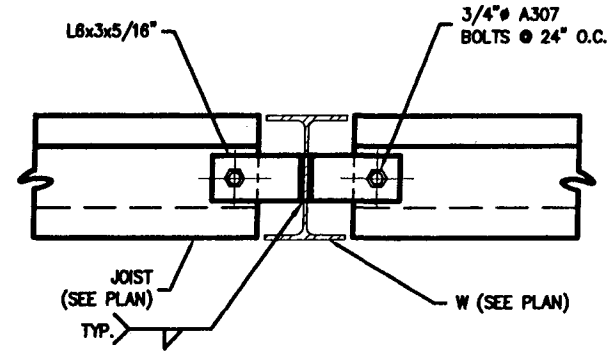
SECTION E
SCALE: 1" = 1'-0" S3.1/S3.1



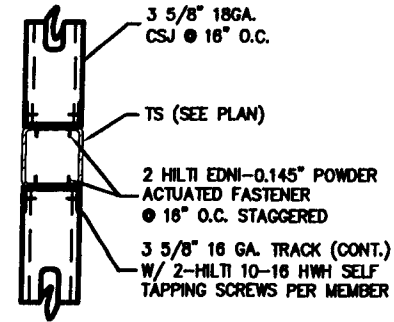
SECTION F
SCALE: 1" = 1'-0" S2.0/S3.0



SECTION G
SCALE: 1" = 1'-0" S2.0/S3.0



SECTION H
SCALE: 1 1/2" = 1'-0" S2.0/S3.1



DETAIL I
SCALE: 1 1/2" = 1'-0" S3.1/S3.1



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OBSERVATION TOWER REPLACEMENT FOR

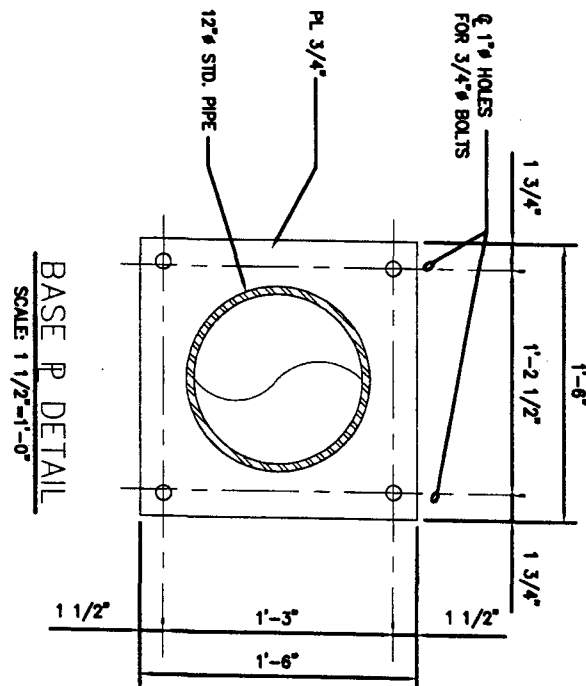
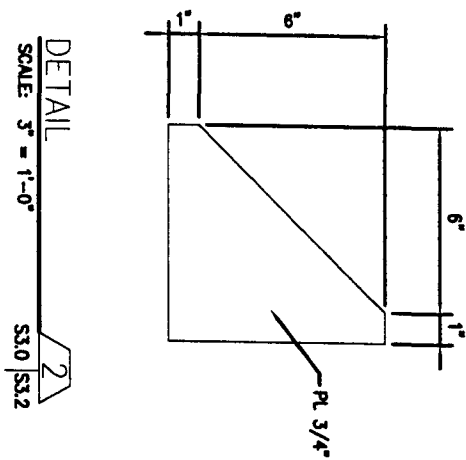
POVERTY POINT STATE HISTORIC SITE

EPSS, LOUISIANA

PROJECT NUMBER: DCRT-OSP-05-12, CFMS NO: 620979

Number: 0046.00 Date: 05/05
S3.1
THIRD FLOOR PLAN

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S3.2 Number: 04046.00 Date: 05/4/05
THIRD FLOOR PLAN

OBSERVATION TOWER REPLACEMENT FOR
POVERTY POINT STATE HISTORIC SITE

EPPS, LOUISIANA
 PROJECT NUMBER: DCRT-OSP-05-12, CFMS NO: 620979

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